The
Magazine of Wall Street
An Exponent of Common Sense In the Buying and Selling of Securities for Income and Profit

Vol. Sixteen SEPTEMBER 4, 1915 No. Ten

What the Steel Barometer Shows

The Rise in Iron Prices—Increased Production—Relation With Stock Market

By G. C. SELDEN

ONE of the most notable features of the recent business situation has been the great revival in the steel industry, and because of the barometric importance of that industry, the following question is now of much interest:

"How far may the expansion in the iron and steel business reasonably be expected to go and how may the climax of its activity be recognized when it comes?" Discussing the subject "How Will the War Affect American Investment and Business Conditions?" in October, 1914, the conclusions reached were that money rates would become easy in the early future; that commodity prices would remain relatively high throughout the war; that our business activity would grow during the war; and that many of our stocks would sell at much higher prices because of the increased earning power of the companies represented.

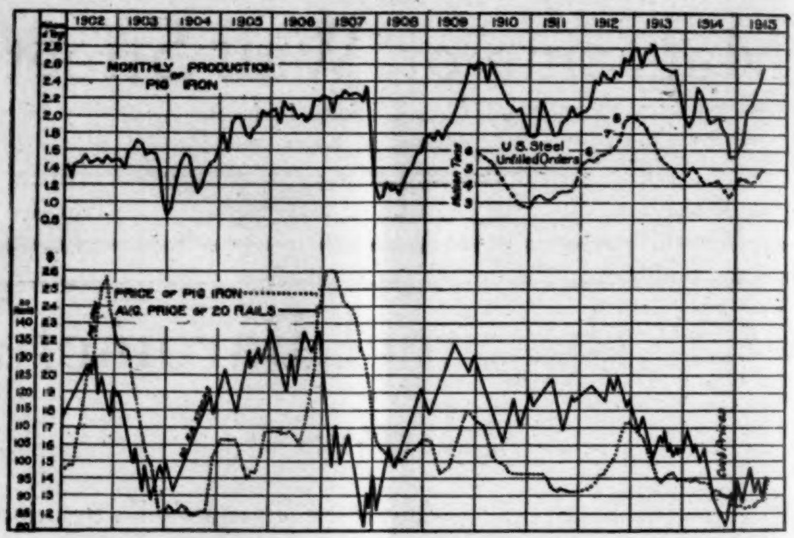
Steel as a Barometer

In arriving at those conclusions the condition of the steel industry was among the subjects analyzed, and the two graphics then used are here completed and brought down to date. The position of the industry at that time was summarized as follows:

"The graphics show that our production of pig iron, unfilled orders of the Steel Corporation, per cent. of orders to production, and the price of iron were all, just before the outbreak of the war, in substantially the same position as in 1904, 1908 and 1911. Our iron industry being almost entirely a domestic proposition, the effect of the war on it has so far been relatively slight and indirect. The price of iron has as yet shown no change worthy of mention, but the activity of the industry has suffered a decided check, which is, I believe, certain to prove merely temporary.

"It will be noticed that there is a surprising correspondence between the general movements of commodity prices and the production of iron. In each case when a decided check was administered to the activity of the iron industry, as in 1904, 1908 and 1911, the subsequent rise of commodity prices was soon followed by a notable increase in iron production, and a little later by higher iron prices.

"Will this precedent be followed in the present instance? I see no reason to doubt it. Steel is the most necessary material for warfare; but the steel business of Europe is almost prostrated. If



the war continues, as apparently it must for some time to come, England, France and Russia are likely to call upon us for a variety of iron and steel manufactures.

"If in addition general business throughout this country is stimulated by the war demand for varied products, our domestic requirements for iron and steel manufactures will be greatly enlarged.

"Owing to the peculiar nature of the present rise in prices, iron production will not follow as closely as in the past, but a gradual increase in production seems to me a reasonable certainty."

Reference to the graphics now shows the natural working out of the situation as it was then outlined. Production of pig iron reached its low point in November and December, 1914, and a rapid increase followed. Unfilled orders of the U. S. Steel Corporation began to rise about the same time. The price of pig-iron—which always turns upward somewhat later than production—reached its low point in February, 1915. Commodity prices, after a premature bulge on the war speculation, started in November, 1914, on a sustained advance, and were followed, as usual, by increased iron production.

In estimating the prospects of this basic industry for the future, it is necessary to bear in mind the general principles which underlie the graphics herewith shown. These were explained in the series "The Art of Interpreting Financial Conditions," June, 1914, page 120. It will merely be necessary to summarize them here.

Underlying Principles

The price level of the stock market depends, in a broad general way, on the supply of capital for use in new enterprises or in the extension of old ones. New enterprises and extensions involve new construction, and iron is the principal material used. Hence the price of iron follows the price of stocks. A bull or bear movement appears in the stock market before it shows in iron or steel; nevertheless, the expansion and contraction of the steel industry is so rythmical that it usually sheds considerable light on the future of the stock market.

A period of low prices, small production and few orders in the steel and iron industry is always followed by an era of expansion, which affects the prices of both stocks and commodities. Just when the movement will start or how far it will go cannot be told from the iron industry alone, but that is one of the important elements in the formation of a sound judgment of the situation.

The general course of the stock market is shown on the graphic by the average of twenty railway stocks. The low-

est point of this average while the stock exchanges were closed cannot be exactly determined, but the dotted part of the line is approximately correct and shows that the low point was very nearly the same as in the panic of 1907. The rally in stocks started, as usual, a little in advance of the increase in iron production and in unfilled orders, while iron prices lagged still further behind.

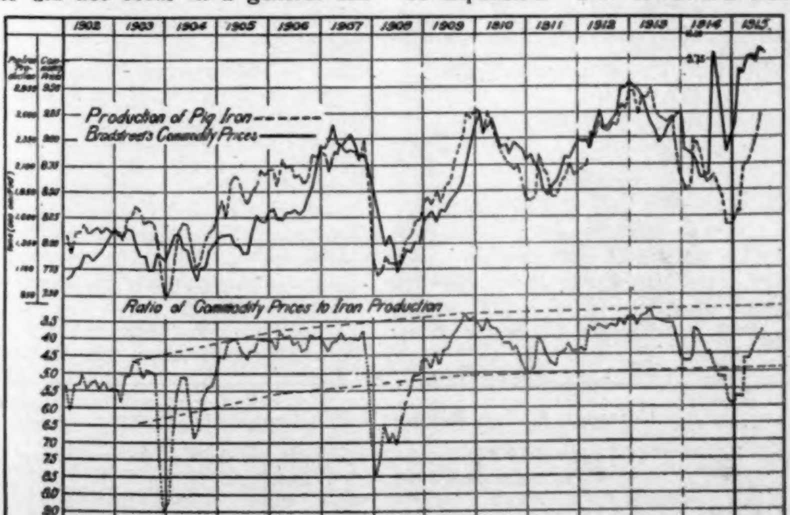
The advance in the industrials has, of course, been much greater than in the rails, because their earnings have been more directly affected by war orders; but the course of the railway stocks more closely represents the condition of business in the United States taken as a whole. Our business activity has not, on the average, increased as rapidly as would be supposed if we were to gauge it by the advances in industrial stocks, because it has been too much concentrated in certain lines while other lines have not as yet felt much benefit from the war orders, directly or indirectly.

How Much Will Iron Rise?

In both of the expansive periods which ended in 1902 and 1906, the price of iron reached fancy figures. This was because we were at that time in a big constructive era. The advances of 1909 and 1912 were much smaller, because these minor cycles did not occur in a general constructive period. In view of the present big waste of capital abroad, it is doubtful whether the situation now contains any such tremendous constructive possibilities as 1902 or 1906, but it is reasonable to expect that the price of pig iron will reach $18 a ton (No. 2 Southern at Cincinnati) at least before the movement culminates. This would be the high price of 1909 and a little above the high price of 1912.

Monthly production of iron should reach a higher point than in 1913, since the country is constantly growing and capacity for producing iron grows with it. We may hazard the guess that the high point of iron production on this swing will be in the neighborhood of 3,000,000 tons monthly.

Unfilled orders of U. S. Steel are more difficult to approximate for the future. The capacity of the big corporation increases constantly and is now considerably above 1912, but unfilled orders depend, of course, on the ratio between demand and supply, and on the proportion of the country's business that the company can get. It has apparently accepted no war orders direct so far, and if that policy is continued its unfilled orders may not reach the same proportion to iron production as in previous periods of expansion. The downward turn in



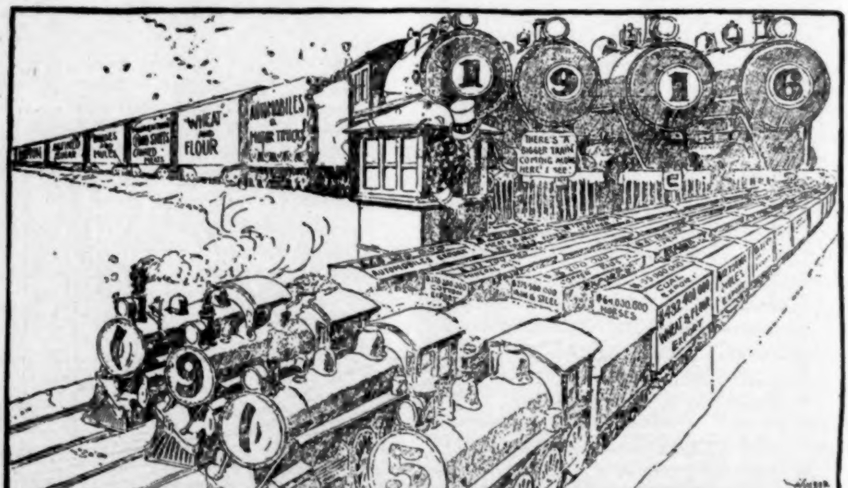
unfilled orders, however, may be expected to come a little before the falling off in iron production.

A sudden rise in the price of iron to around $18 a ton would naturally make us much more suspicious of the permanency of the demand than if the price were to climb to that figure slowly and by easy stages, as it would indicate the speculative period of expansion in the industry. When speculation begins to affect any industry the result is a much quicker rise of prices than when the advance is for the most part due to actual consumptive demand. The jump in commodity prices in August, 1914, is an extreme example of that principle.

It will be noted from the graphic that commodity prices generally begin their downward swing a little earlier than iron production falls off, after the climax of the wave. Hence *Bradstreet's* Index is always an important figure to watch.

The ratio of commodity prices to iron production has always been a very interesting feature to observe. In the panic of 1914, as in 1907 and 1903, this ratio dropped entirely below its ordinary channel, and it has since risen rapidly, just as in previous instances. One would say, in this case, that commodity prices are likely to be more affected by the war than iron production is affected, and hence that the line of this ratio may not rise as high as in 1913. Yet it is extraordinary how closely these relations of things repeat themselves in the successive minor cycles. It is usually dangerous to say, "This situation is different and will therefore work out differently," because in most cases it works out just about the same in spite of individual features that are different.

We can at least say definitely that at present *there is no indication that either the expansion of the steel industry or the bull movement in stocks has reached its culmination.* The price of iron, in particular, should show a much sharper advance before the upward movement ends.



Coming: A Two Billion Dollar Prosperity Train

Note: Exports of 1915 aggregated a billion dollars in value and those of the coming year will be worth double that.—N. Y. American.

Foreign Exchange

What It Is—Present Situation and Effect on Business

By BARNARD POWERS.

Definition—Foreign Exchange is the financial system by which debtors in one country liquidate their debts to creditors in another country. It includes the mechanism by which the moneys of one country are exchanged or converted into the moneys of another country.

MUCH has been written about the crisis in foreign exchange of late. Many readers have doubtless asked themselves why all the commotion about the decline in exchange, which now is at the lowest point in forty years. To the uninitiated the whole matter appears more or less academic, but in reality it is one of the many reasons which cause bankers to grow prematurely gray about the temples.

Everyone knows that foreign exchange has something to do with the transfer of money, or its equivalent, from one country to another, but beyond that the popular conception of this most important phase of international banking is most hazy.

Mr. Plain Citizen need not feel ashamed of his lack of knowledge. The man has yet to be found who can truthfully say that he knows all about foreign exchange. And the number of those who have spent the best part of their lives in the foreign exchange marts, and yet have scarcely more than a "working knowledge" of their trade, is surprising. The subject of foreign exchange is boundless and deep as the sea. Investigation carries the student into the broad realms of banking and then into the more intangible and rarer atmospheres of economics, where he may spend the rest of his days without exhausting the subject.

But there are easily understandable elements of foreign exchange which everyone should know.

The general subject of exchange (i. e., the payment of obligations due at one place by transfer of credit from another) divides itself naturally into two classes—domestic and foreign exchange. The former is so well understood that it need only be mentioned. You wish to make a payment of $100 to a creditor in Chicago. The simplest way is to send your check. Thus in exchange for the credit you have been allowed, you deposit a part of your New York credit to the account of your Chicago creditor. And the operation is reversed if your position as debtor is exchanged for that of creditor.

But supposing you have sold a bill of goods worth $100 to a Glasgow merchant. As is customary in such transactions, you draw a sterling draft upon the Glasgow buyer for the full amount. You might conceivably send the draft by steamer and ask your debtor to remit the amount to you in gold, the standard of international banking. But a simpler way is to sell your draft to your banker, who discounts it for you on the basis, in normal times, of about $4.83 or $4.84 on each pound sterling. The exact value of a pound, expressed in our money, is $4.86665.

Buying, selling and discounting of form the basis of the foreign exchange business, although it takes numerous other forms.

The rate of exchange depends upon supply and demand. When a vast number of bills of exchange are being offered, as at present, low rates naturally prevail. The fundamental causes which produce a demand for foreign exchange and bring about high rates of exchange are: (1) heavy imports, (2) purchasing of foreign securities, (3) maturing of American bonds held abroad, (4) low money rates here, (5) high money rates abroad.

Low rates of exchange arise from: (1) heavy exports, (2) purchasing of our securities, (3) high money rates here, (4) low money rates abroad.

Such are the fundamental factors

which guide the barometer of foreign exchange. The great disturbing element which has driven foreign exchange to unprecedentedly low levels at this time, is the enormous export business which this country is doing with the Allies. Naturally, exporters are unwilling to discount their drafts on the basis of the present ruinous rates. They would much prefer to receive their payments in gold, but the British government has placed a partial embargo upon the yellow metal and even tourists leaving the country are searched lest they carry away with them an illegal amount of gold.

The British buyer has then a hard choice. If he buys American dollars he must pay something like $5.09 in British money for each $4.86 he owes in America. Small wonder that a distinguished delegation of British financiers are hastening to this country to find a way out of the present difficulties.

Outside of shipping gold the only things our foreign creditors can do are to pay us in our own money or else strive to offset the enormous balance of trade against them by selling their goods or our securities to us. They have already resorted to these methods, but the maw of war is insatiable and the trade balance, already at astounding proportions, continues to mount steadily.

The relative immensity of our trade balance is brought out by the table on this page, which shows our excess of exports over imports for the last decade.

Nor does the above table complete the story. July's figures show an export balance totaling $125,000,000, round figures, and the export of war materials has scarcely more than commenced. In addition, the season of the year is at hand when this country makes its heaviest shipments of foodstuffs. So that relief to the foreign exchange situation seems remote indeed, unless some step like the establishment here of large credits by foreign countries is undertaken.

There are three ways to rectify the foreign exchange situation. The first is by shipments of gold by foreign countries, secondly, the sale of American securities and foreign war bonds, and thirdly, the creation of huge credit balances in this country secured by adequate collateral. The extent to which the first method has been employed is shown by the table on the opposite page, which gives shipments of gold here by other countries, up to August 11.

At first sight, it would seem a very attractive operation to buy sterling drafts at the present rate of exchange, liquidate them in London for gold and then ship the gold to this country. A million dollars invested in this way would show a gross profit of approximately $50,000, which is a pretty fair return, even from a banker's standpoint. But while the Bank of England has not suspended gold payments, the "Old Lady of Threadneedle Street" is too astute and has been in the business too long to allow any such "rake-off" at her expense. She has convinced the British government, if the government needed any convincing, that it is a good thing to keep gold at home. The government has accordingly placed an embargo on gold exports. So that the only thing left is to buy American dollars which sell proportionately as high in London, as sterling sells low here.

Doubtless the Allies are letting all gold go out that can be spared, but it is urgently needed at home to fortify al-

EXCESS OF EXPORTS OVER IMPORTS

1915	$1,094,422,000
1914	470,457,000
1913	652,875,000
1912	551,057,000
1911	522,094,000
1910	188,037,000
1909	351,090,000
1908	666,431,000
1907	446,429,000
1906	517,308,000

ready badly inflated currency issues. It is estimated that emergency currency issues now total about three billions, and the more gold that goes out the more these issues are likely to depreciate.

There is no prospect of relief through the considerable increase of the demand here for sterling, not only because our imports have fallen off, but also because this year will see much smaller interest and dividend payments to foreign holders of our securities. As shown earlier in this article these two factors are among the important ones which create the demand for foreign exchange on other countries. It estimated that America has repurchased at least $500,000,000 of American securities formerly owned abroad. This alone means, allowing a 4 per cent. per annum rate of interest, a premium for dollar drafts on America, they will strive to curtail their expenditures in this country. Probably Europe would continue to buy war munitions anyway, but when it comes to commodities like cotton, leather, copper, etc., to say nothing of the luxuries, there is considerable margin for curtailment. Low foreign exchange is a heavy drag on foreign consumption of American goods and tends to drive foreign trade to other markets. So it is for our interest, too, that the exchange situation be rectified or at least alleviated. We want Europe to spend all she can in this country.

Unsatisfactory as foreign exchange situation is at present, the international trade situation as a whole is most satisfactory. The United States is now the greatest exporting nation in the world.

Gold Shipments for Year to August 11th.

Canada	$94,168,000
England	20,590,000
France	11,500,000
China	3,700,000
Japan	9,625,000
Brazil	2,500,000
Holland	2,000,000
South America	1,300,000
Total	$145,383,000

decrease of $20,000,000 in demand for foreign exchange in a year.

Nor will the shopkeepers of the continent rake in the golden annual harvest of American dollars, which in ordinary times means a big demand for foreign exchange. Travelers' checks and other remittance forms used by tourists take annually about $150,000,000 out of this country, it is estimated. This year practically all of that money will remain at home. Many other factors tend to keep down the demand for foreign exchange. The total of the falling off can only be guessed at, but it can be conservatively said that it will aggregate several hundreds of millions of dollars.

The present tension in the foreign exchange market means something more than a matter for our creditors to worry about. It affects this country, too, though less sharply. As long as importers abroad have to pay the present ruinous For the year ended June 30 last our exports totaled $2,768,000,000, or nearly $600,000,000 more than the British exports. This is the first time in our history that our exports have topped those of our cousins across the sea.

The old world owes the new world more than a billion dollars. And the old world must foot the bill.

The United States has now the proud distinction of being the only country in the world whose currency has not depreciated and whose business is approximating normal. As a banking center we have gained tremendously and the realization of "dollar exchange" is now nearer than ever before. Whether we shall oust London permanently as the world's greatest money center remains to be seen. For the present at least we are the world's greatest banker, and the continuation of the war only enhances our importance.

MONEY-BANKING-BUSINESS

What Thinking Men Are Saying

About Financial, Investment and Business Conditions

Sir George Paish on Foreign Exchange Problem.

WE speak of the foreign exchange problem as if it were merely a technical difficulty, which could readily be corrected by pressing the right button somewhere. The real point is, of course, that the foreign exchange rate is only the superficial indication of the fact that we are selling Europe a tremendous amount of goods that Europe doesn't want to pay for now. Europe could solve the foreign exchange problem in two minutes by shipping us in gold the full amount owed us—but Europe wants us to give long term credit of some sort in place of the short term credit we have already extended in shipping the goods.

Sir George Paish put the matter very clearly in a recent statement to the Associated Press:

In the next six months to Christmas the balance of exports over imports in favor of the United States, after making allowance for all outgoings, for interest and service, probably will be $1,000,000,000; it conceivably may reach a still greater figure.

Obviously it is quite impossible for Europe to buy upward of $2,000,000,000 of goods from the United States in a single year unless the American people are willing to do what the British people always have done—take payments for goods in securities. American exports will be limited in the current half year only by the ability of European and other nations to pay for goods, first, by shipment of their own products to the United States; second, by shipment of gold; third, by sale of securities, and, fourth, by means of credits. If the American people are dubious about giving credit, then it is obvious the amount of goods they sell must be reduced to the amount foreign nations can pay for by other means.

* * *

Can Europe Pay Us Without Sending Gold?

THERE are serious difficulties in the way of each one of the four methods of payment mentioned above by Sir George Paish. The only easy way—sending us gold in full—is just the one Europe wants to avoid if possible. The First National Bank of Boston comments as follows:

In view of the accumulating war loans and the large balance of indebtedness, reflected in exchange rates, in favor of this country and against Europe, the question of inducing America to take some part of the new obligations is assuming critical importance, especially in Great Britain. English economists have urged three methods of overcoming the adverse balance—to reduce England's imports by means of greater economy of private expenditures, to send back American securities, and to place war loan securities in our markets. Figures based upon careful investigation do not indicate that the holdings of our securities abroad are greatly in excess of $3,000,000,000 holdings of railway issues are less than that sum. The volume returned to us thus far is estimated at something over $200,000,000—possibly nearer twice that amount—but of the remainder the greater proportion are closely held by investors and will not be easily released for the liquidation of Europe's debts. It seems probable that an increasing effort will be made, especially with the coming due of various temporary loans in this country, to place quantities of the war issues in America. So far as such effort may prove successful it

RIGHT IN THE SWIM.
—*N. Y. Telegram.*

A DIZZY FLIGHT.
—*Puck.*

will not portend very favorably for new financing for our own industry, which has recently been only about two-thirds of normal.

The *Chronicle,* after commenting on the rapid increase in the trade balance in our favor, adds:

But that is not all. It is certain that during the current and the immediately ensuing months the trade balance must continue to pile up at the same if not a greater rate. The fiscal year's balance, we may assume, has already in the main been settled for, partly by the return of securities, partly by gold exports to the United States, and there were, of course, as is always the case, large offsets against the balance, represented by interest and dividends on American securities owned abroad and on investments of foreign capital here, and by freight on ocean cargoes and other items. As far as this past fiscal year is concerned, we may take it for granted that only a relatively small sum had to be taken care of through the establishment of foreign credits here. There remains, therefore, the new trade balance that will accumulate month by month in favor of the United States to provide for. For the late year this averaged for the four countries combined not quite 100 million dollars per month. Even if it should run for part of the time as high as 150 million dollars a month the task ought not to be beyond the ability of the United Kingdom, with its vast financial resources, to assume, after allowing for the offsets that will also accrue during the same time in the way already mentioned.

Knauth, Nachod & Kuhne, in a very suggestive discussion of the foreign exchange situation, say:

This situation provides apparent basis for the prediction made in various quarters that our foreign trade balance will pass the two billion dollar mark by the end of the calendar year. Should the war continue another year, as various foreign experts believe that it will, there is no telling how much further the purchasing movement will go.

The largest question therefore, connected with the financial operations of the war in their bearing upon American finance, has to do with the course of the foreign exchanges during the period of active fighting. The cost of fighting, like the cost of living, is at the highest level ever known, and the burden is likely to increase. The problem of financing the war becomes more complex each month that the fighting lasts.

Great Britain, for months past, has rejected all proposals to borrow here on any broad scale. A loan of some kind would seem to be inevitable, however, as in no other way will it be possible for the London bankers to bring order out of chaotic conditions prevailing in the market for sterling exchange. What has already been done toward "mobilizing" foreign owned American securities, as the basis for a huge American credit fund, is good so far as it goes. But an extraordinary situation calls for the adoption of extraordinary measures, and it is clear that some thoroughgoing programme must be adopted not alone in the interests of the foreign buyers but for the protection of American sellers.

* * *

Banks of the World Bursting with Money.

IN the meantime, the banks of the whole world are bursting with money. The banks of Europe have made every effort to collect into their vaults as much gold as possible, to guard against the increasing strain of the war. How they have succeeded is shown by the following table, taken from the Boston *News Bureau:*

The following sets forth (in thousands of dollars) the latest gold holdings reported by European banks, and their holdings at beginning of August, 1914:

	August, 1915.	August, 1914.	Increase.
Bank of France	$834,552	$786,857	$47,695
Bank of Russia	792,623	816,088	*23,465
Bank of Germany	571,036	322,254	248,782
Bank of England	†454,219	131,205	323,014
Bank of Aus.-Hung. ..	‡244,996	244,996	....
Bank of Italy	**217,389	215,625	1,764

*Decrease. †Includes $28,500,000 gold for redemption of treasury notes. ‡No report furnished since July, 1914. **As of June 30, 1915.

In America the plethora of money is still greater, and with the important difference that on this side credit is equally easy, while abroad credit is tremendously extended, by the aid of government guaranties of various kinds. A late report by Comptroller of the Currency Williams thus summarizes the position of our banks:

The national banks of this country and the twelve Federal reserve banks, exclusive of the State banks and trust companies, have at this time an unemployed loaning capacity sufficient to enable them, if need be, to carry for our own people at market value the entire cotton crop and half if not the whole of the wheat crop and tobacco crop, which it is not of course conceivable that they will be asked to do, and also finance until the purchasers can pay in gold or its equivalent a thousand million dollars or so of exports of foodstuffs or manufactured products to be shipped to the rest of the world.

It is far better for the banks to employ their surplus funds in making loans on staple commodities where they can relieve congestion or promote legitimate commercial transactions, rather than permit these funds to be used for the inflation of the stock markets where speculation in securities has already reached a point which invites caution.

The surplus reserve, it is estimated, is sufficient to justify on a conservative basis an expansion of credit or a further loaning power of say two or three billion dollars. The present total loans of all the national banks amount to about six and two-thirds billion dollars.

* * *

"Seven Years of Prosperity."—Edison.

THOMAS A. EDISON has several times lately expressed optimistic sentiments in regard to business prospects in this country. In a recent interview he said:

Entirely leaving out the question of war industries, activities which are simply a hectic flush and do not give a complexion which indicates the healthy advance of commercial enterprises in the United States, I am satisfied this country has embarked upon a seven years' cruise of prosperity.

But it may be the same story over again—I am afraid it will—some will try to overdo it. Bad times will follow that, but not so bad as we have seen before, because the banking systems of the country is now really sound. People can be confident of good times, but they must learn to save and avoid extravagances.

The war will likely continue another year, and at its close undoubtedly many survivors will come here to escape the terrible taxes certain to be levied upon them. But there remains plenty of land uncultivated in this country and these people, accustomed to intensive farming, will assist us to increase our crops. And that's what we need; intensive farmers. Where we are getting fifteen bushels to the acre we ought to get forty. These European farmers can produce the large amounts, too.

* * *

Report of the Walsh Industrial Commission.

THE recent report of the Industrial Commission, of which Frank P. Walsh was chairman, contains little cheer for the would-be optimist. This is natural, as the commission was appointed for the purpose of finding remedies for the acknowledged evils of our industrial regime:

The most striking evidence of poverty among workmen is the proportion of pauper burials. In New York City one of every twelve corpses is buried at the expense of the city, or turned over to physicians for dissection.

Children are the basis of the State. Through a study made by the Federal Children's Bureau in Johnstown, Pa., it was shown that the babies whose fathers earned less than $10 a week died during the first year at the appalling rate of 256 in the thousand. Those whose fathers earned $25 a week or more died at the rate of only 84 in the 1,000.

The last of the family to go hungry are the children, yet statistics show that in six of our largest cities from 12 to 20 per cent. of the children are noticeably ill-nourished.

Have the workers received a fair share of the enormous increase in wealth during the past quarter century as a result largely of their labors? The answer is emphatically—No!

The wage earners' share of the net production of manufactures was only 40-2 per cent, in 1909, as compared with 44-9 per cent. in 1889.

With the inexhaustible natural resources of the United States, and the genius of her people for organization and industry, there can be no natural reason to prevent every able bodied man from being well fed, well housed, comfortably clothed and from rearing a family of moderate size in comfort, health and security.

It is evident from the investigations, however, that a large part of our industrial population are, as a result of low wages and unemployment, living in actual poverty.

The practical recommendations of the Commission were for Government control of telegraphs and telephones; equality for women, and pending that, further protective legislation for their interests; complete collection of wage statistics by

the Federal Government; legislation limiting hours of labor; creation of a bureau of industrial safety; prohibition of tips, etc.

None of the recommendations, however, were unanimous. *The Nation* flatly calls the whole enterprise "a fiasco:"

The Commission broke up in total confusion. There were nine members, and at least ten different opinions. No general report could be agreed upon for submission to Congress. Each commissioner had to go it alone, or else be one of several small groups to sign separate and conflicting findings and recommendations.

It may be doubted whether the most sagacious Congressmen ever looked for any very definite benefits at the hands of the Commission. To create it was a convenient way of referring and delaying a matter on which it was hard, and perhaps unwise, to lay down a general public policy. Hence they may have been actuated by something of the motive expressed in the cynical saying of Lord Salisbury, that often the best way to dispose of a troublesome question was to let it die by means of a Royal Commission. For two years, at all events, Congress has let the Commission wrestle with the problem of industrial unrest; and if, in that period, it has done anything but muddle things up and add to the said unrest, the fact does not appear in any of its reports or in the impression which it has made upon the public.

* * *

Secret of Germany's Military Success.

CHARLES FERGUSON, a man of brilliant abilities and radical temperament, who recently spent several months investigating financial conditions in Europe as the agent of the U. S. Department of Commerce, explains in a letter to the *American* what he believes to be the secret of Germany's superior military system and consequent success in the field. The following extracts give the gist of his exceedingly interesting views:

There is nothing mysterious about the power that broke the gates of Antwerp and Warsaw —and there seems to be nothing specially German about it.

Indeed, it is a kind of power that, by all the laws and forecasts of our own tradition, should have arisen first in the United States. For at bottom it is nothing but *working power*.

This conquering energy that is for the moment called German inheres in any modern industrial system that is halfway honest and practical—any system that is worked somewhat in the interest of manufacturers, engineers and artisans, and not wholly in the interest of mortgagees and people with a legal claim to endless leisure.

IT COST ONLY $500,000!
—*N. Y. World.*

The industrial power of Great Britain, like that of France, has steadily declined for a generation—in even pace with the increase of unearned incomes.

When we are told that the British incomes subject to the income tax amount to nearly five billion dollars, and that nearly half this amount is from year to year "saved" and added to the capital of the country, we must not leap to the conclusion that English finance is the rock of Gibraltar.

The riches of England are like those of a man holding a ten-thousand-dollar mortgage on a five-thousand-dollar farm, who does, in fact, manage to wring out half the interest in real goods (to the deep distress of the farm and the farmer), but is obliged to "save" the other half of the interest and to add it to the principal sum of the mortgage.

By constantly increasing the volume of stock-and-bond indebtedness so that the income charges are continually postponed and recapitalized it is possible for a nation to grow infinitely "wealthy" even while its working apparatus steadily diminishes in the bulk and quality of its product. A swelling public debt has generally this character; it is a recapitalization of income claims that the working organization is too weak to actually pay.

This process of increasing the charges upon the working organization *pari passu* with the deterioration of the general plant is what has been going on for a quarter of a century in western Europe and the United States.

The end of the process will be the end of the war.

To recapitulate, let me say:

First, that the sovereign power of the modern world seems to have passed quite

definitively into the organization for the mastery of tools and materials.

Second, that this mastery holds in war as in peace, since war has come to be only a form of tool-power.

Third, that in the modern war the winning side is necessarily the side with the sounder industrial system.

Fourth, that the principal test of this soundness turns upon the question whether the power of financial correlation and control is exerted mainly for the improvement of the system or mainly for the fastening upon the system of all the burdens the traffic can bear.

* * *

Cotton Now Contraband—McAdoo Offers Big Loans.

THE placing of cotton on the contraband list by England has had little effect on the price because, first, we have not been exporting much cotton to Germany, and second, making it contraband will not entirely prevent the small movement that has been going forward to the Teutonic Allies. W. P. G. Harding, of the Federal Reserve Board, recently said to the Alabama Merchants' Association:

> The more I study the subject and the more information that I receive bearing upon it, the more I am convinced that the present situation, while calling for intelligent leadership and close co-operation, is by no means a desperate one. On the contrary, the immediate future has many elements to inspire hope and confidence. The making of a market is by no means a one-sided proposition. The buyers of cotton have a natural advantage in their greater powers of analysis, in their concentrated financial resources, in their ability to take their own time, but now, as always, the movements of Southern producers are closely watched and evidences of staying power on their part are effective in market quotations.
>
> Let Southern bankers wherever possible, make liberal concessions in their usual rates on commodity loans. High interest rates mean forced sales. Present conditions fully justify low rates, and Southern bankers should be willing to forego temporary profits for the sake of security and solidity in the future. I am sure that the Federal Reserve Banks may be depended upon under their power of rediscount, to co-operate to the fullest extent with the banks in taking care of the cotton crop.

In the meantime, Secretary McAdoo proposes to deposit $30,000,000 of Government gold with the Southern banks, to serve as a basis for loans on cotton which is being carried for higher prices. Northern bankers doubt the necessity of such a deposit, but perhaps it is just as well to be on the safe side in arranging abundant credit for cotton growers.

* * *

How the Railroads Have Cut Expenses.

SLASON THOMPSON, director of the Bureau of Railway News and Statistics, gives out some interesting figures showing complete gross earnings for all roads and the vigorous efforts the roads have made to get their expenses down to correspond with the falling off in gross:

> For the first half of the last fiscal year there was a startling recession in railway revenues of over $108,000,000. Since New Years, however, there has been a slow recovery, resulting in a higher gross for May and June over the corresponding months of 1914, but still considerably below the gross for the same months in 1913. For the second six months of the fiscal year 1915 the loss in gross revenues was less than $15,000,000, making a total decrease for the year of over $123,000,000.
>
> The gross operating revenues, by months, of the railroads of the United States computed from returns made to the Interstate Commerce Commission for the years 1915 and 1914, compare as follows:

	1914-1915.	1913-1914.
Average op. mileage....	255,840	253,295
July	$262,871,065	$270,073,971
August	274,213,779	283,467,432
September	276,777,815	287,566,107
October	273,915,671	301,083,625
November	240,053,828	271,030,061
December	232,360,102	256,318,653
Half year	$1,560,192,260	$1,669,539,849
January	221,850,633	234,788,770
February	212,441,442	210,342,128
March	239,771,234	251,092,603
April	239,251,611	238,846,013
May	246,480,414	240,953,107
June	254,735,000	252,925,226
Half year	$1,414,530,334	$1,428,947,847
Twelve months	2,974,722,594	3,098,487,696
Per mile line..........	11,623	12,232

> It was not until January, 1915, that the operating ratio began to respond to the drastic cutting down of expenses are shown herewith:

With July of this year, however, increases in both gross and net began to be shown over July, 1914—and that in spite of the fact that the war did not begin to affect business last year until August. Evidently the roads are beginning to feel the effect of reviving business in many industries, a development which should be reflected in the security markets if indeed it already has not been.

	Thousands. 1914-15.	1915. Ratio.	Thousands. 1913-14.	1914. Ratio.
July	$183,966	69.99	$189,700	70.24
August	184,585	67.32	193,721	68.34
September	183,330	66.24	193,906	67.43
October	184,714	67.44	202,865	67.38
November	172,042	71.67	192,420	70.99
December	171,280	73.71	187,026	72.97
Half year	$1,079,918	69.22	$1,159,638	69.46
January	170,096	76.66	181,812	77.43
February	161,021	75.79	170,713	81.11
March	171,096	71.35	183,316	73.01
April	171,511	71.69	178,868	74.88
May	174,076	70.65	182,812	75.87
June	172,022	67.53	180,507	71.37
Half year	$1,019,825	72.10	$1,078,028	75.44
Twelve months	2,099,744	70.58	2,237,666	72.22
Per mile line	8,207	.....	8,834	.....
Ratio to rev. %	70.58	.....	72.22	.....

* * *

Steel and Copper Conditions Encouraging.

AS shown in an article elsewhere in this issue, there can be little doubt that the steel industry is definitely embarked on one of its long upward swings. In regard to copper, there has been more doubt, but recently the improved demand for that metal has lifted the price above 18 cents again.

Renskorf, Lyon & Co.: It is no longer a matter of doubt that the revival in the steel industry has passed from the realm of hopeful theorizing into one of solid reality. The transition from an output of 40 per cent. in January to the theoretical 100 per cent. in less than nine months is without parallel in the industrial history of this or any other country. It emphasizes a resiliency arising from extraordinary conditions, and foreshadows possibilities that are bewildering even to the most conservative temperament.

Extensions and new construction by steel companies in the last three years have added enormously to productive capacity. Assuming a maximum of 94 per cent. at Corporation plants from July 1, 1915 to July 1, 1916, and allowing for increased capacity over 1912, there is an indicated production for that period of 22,250,000 tons of steel ingots, a gain of 5,250,000 tons over the highwater mark three years ago. These figures do not take into consideration the probability of further increased capacity.

HE'LL BE "BOUNCED" IF HE ISN'T GOOD.
Spokane Spokesman-Review.

Journal of Commerce: Early in July, copper became dormant. Buying for European Governments came to a close, while American manufacturers, who had booked orders for munitions, completed their purchases of copper. With this heavy buying that took place during May and June, the price of copper was rushed up to slightly above 20 cents and under the stimulus of this high price production of the metal was increased proportionately.

All the large copper mines placed their full facilities into operation. Producers were of the opinion that the resumption of buying on the part of France, England and Russia, as well as American manufacturers engaged on articles for war consumption would not be long in abeyance and under this assumption, orders for further expansion in the production went forth and prices were sustained around the 20 cent level. When the renewal in the demand failed to materialize early in July, the copper producers pointed out that the remarkable strides made in the steel industry would extend a beneficial influence to electrolytic, more so at this time, because most of the steel mills were turning out materials that were to be made up into products that enter into the manufacture of war material and required copper.

But these surmises went amiss. In the first place, it developed that England, France and Russia had purchased all the copper they would require for some time to come. Secondly, the anticipated record breaking consumption of copper on the part of war material manufacturers failed to transpire owing to unlooked for contingency. When American manufacturers received orders for shells they had to purchase machinery for their manufacture. Naturally, with twenty-five to fifty manufacturers seeking lathes, and other machines of a similar nature, the makers of these products fell behind on deliveries and thus, while the war order holders began receiving their copper in July, actual consumption in many cases did not start until this month, and in some cases has not begun as yet. Here, then, was a clear delay of a month to six weeks in consumption.

Thus copper began to recede in July, gradually declining to the 16-cent level which was touched last week. Consumers of the metal looked for further declines, it being figured that with the production at about 20,000

tons a month in excess of consumptive requirements that the price must go lower. Again many of the consumers were not in urgent need of the metal and were in a position to refrain from buying for at least another month, and therefore copper at 15 cents and at 14 cents was considered a possibility.

The advance to 18 cents has for the time being upset all calculations on the part of consumers to restock at the low prices, and the situation as it stands today is whether or not the producers will be able to sustain prices if consumers show further antipathy against buying or whether consumers, once more frightened by advancing copper prices, will rush into the market to cover requirements for three to five months hence and thus assist in another spectacular upward movement to above the 20 cent level.

* * *

Prospects for the Security Markets.

A FEW representative opinions in regard to the future of stocks and bonds follow:

A. B. Leach, President Investment Bankers' Association: The general bond buying public maintains a waiting attitude. No doubt, a considerable number of this class have made purchases of stocks, and to some extent bought what are generally recorded as speculative bonds. Such purchases are as a rule considered as temporary.

In my opinion, first mortgage public utility bonds continue in favor as the most satisfactory investments for the average buyer, and a very large part of the funds now being placed in stocks and speculative bonds will soon begin to find its way into conservative and permanent investment channels. Furthermore, a very considerable portion of the bond buying public continues to accumulate cash, foreshadowing a strong investment demand as normal trade is resumed.

Hayden, Stone & Co.: While taking a broad range view, the situation seems all that could be expected, it must also be remembered that in such a situation there must be breathing spells for digestion. It would seem as though we had reached such a spell. The market has had a continued advance for nearly two months, in which many issues have scored sensational gains. The discounting process has been going ahead rapidly. It would be quite in order to wait until business catches up with the market. After further consolidation of the present position, we look for a renewal of the movement.

Thompson, Shonnard & Co.: The war order specialties continue to command most attention, and while certain of these issues do not appear to be entitled to the sustained advance they have had, there are other issues in which the advance appears to be fully justified and which appear to be entitled to sell substantially higher.

Schmidt & Gallatin: In view of the intense speculation in the "war stocks," it would be interesting to see what would happen to the market if peace proposals began to take form without warning. Sporadic attempts to revive interest in the rails have failed, and it is not likely that a real bull market in this portion of the list will develop until the present congested position of the "war stocks" has been liquidated.

Market Statistics

	Dow Jones Averages 12 Industrials	20 Railroads	50 Stocks High	Low	Total Sales	Breadth (No. issues)
Monday, August 16..........	98.72	94.20	78.25	76.54	944,800	171
Tuesday, " 17..........	98.64	94.24	78.79	77.32	1,015,100	169
Wednesday, " 18..........	99.26	94.10	78.50	77.19	906,100	167
Thursday, " 19..........	98.06	93.48	78.22	76.47	1,100,100	172
Friday, " 20..........	97.02	93.00	76.68	75.30	958,800	156
Saturday, " 21..........	94.37	91.95	75.85	74.24	541,200	151
Monday " 23..........	94.64	92.28	75.29	73.18	901,800	156
Tuesday, " 24..........	96.80	92.76	76.11	74.67	792,400	155
Wednesday, " 25..........	97.76	93.62	77.86	76.44	1,070,500	176
Thursday, " 26..........	98.58	93.63	77.98	77.12	672,900	163
Friday, " 27..........	99.50	93.78	78.25	77.29	924,200	167
Saturday, " 28..........	99.51	93.93	78.19	77.56	354,900	150

BOND DEPARTMENT

Why The Municipal Bond?

"Safety First" Principle Exemplified by the Municipal Bond

By WM. RUTGER BRITTON

STEAM RAILROAD BONDS have proven such unsatisfactory investments during recent years that many investors are perplexed and disheartened. Even railroad equipment bonds are in some cases defaulting and the extensive literature circulated by the bond houses in recent years describing the merits of railroad equipment trusts must be revised.

Likewise numerous defaults have occurred in the bonds of industrial corporations. In the traction field the business depression, rising operating costs and jitney competition have caused numerous bond defaults and dividend reductions. Many holding corporations have reduced or suspended dividends, and perhaps the end is not in sight.

But municipal bonds have been unaffected by these adverse conditions and are unquestionably the safest and most attractive bonds for investment. There have been no conspicuous defaults in municipal bonds for at least twenty years. However, a few years ago some thirty-year Atchison (Kansas) 4 per cent. bonds matured and the Mayor attempted to refund the obligations by offering holders a security worth less than the par value of the maturing bonds. The Mayor was not a business man. Appeal was made to the court and the judge took instant action by ordering the city officials to immediately raise funds for paying the bonds, and this was done in twenty-one days. So, after many investment disasters an increasing number of private investors are beginning to buy American municipals. This is THE logical investment conclusion.

During recent years many investors have learned that high return involves risk. People who have sought 6 per cent. and more in steam railroad and public service securities begin already to realize that deducting losses from bond defaults and dividend reductions, their investments average a 3 per cent. to a 4 per cent. yield instead of the expected 6 per cent. or more. But there have been no losses in American municipal bonds for a generation. Formerly good marketable municipal bonds sold from a 4 per cent. to 5 per cent. basis, but owing to the demand for money which existed before the war and to the present disturbed conditions, sound marketable American municipalities are now obtainable at prices to yield 4½ to 6 per cent. Good Canadian municipals of the class that were formerly sold at prices to yield 4½ to 5 per cent. now can be bought at prices to yield 6 per cent. This revolution in bond prices is the investor's opportunity and he can now purchase investments impregnably secured at the same high yields which were formerly obtained on steam railroad and public utility bonds, the very securities which are now showing losses in many cases.

But why are municipal bonds so safe? They are a first lien on all real and personal property and the general credit obligation of all the inhabitants of the issuing community. Municipal bonds are payable from taxes that are a lien ranking prior to all real estate

mortgages, steam railroad and corporation bonds and even receivers' certificates. Moreover, the legality of municipal bonds in many states is incontestible. The old saying that "nothing is sure but death and taxes" really means that municipal bonds are the safest investment in the world because taxes must be paid, and the officials of municipalities are required by law to pay interest on municipal bonds from the proceeds of taxes.

Municipal bonds are usually sold at public sale so the records of competitive bids are available to institutions and private investors. Municipal bonds are marketed at very low cost compared to steam railroad and public utility bonds. Moreover, municipal bonds have a ready market and during times of panic and depression undoubtedly have a better market than any other form of securities.

But these remarks or claims for municipal bonds while generally known are really not appreciated by the average investor. When a bond buyer has experienced losses in various classes of securities he is usually in a more receptive mood to consider the advantage of buying municipal bonds. The writer herewith desires to advance some additional reasons for buying municipal bonds.

FIRST: No income tax certificates are required in collecting coupons on municipal bonds. This is a great saving of time and trouble. But the greatest advantage is that municipal bonds being exempt from provisions of the Federal Income Tax will not be subject in future years to an increase in the amount of the tax levied. One of the greatest dangers in purchasing bonds taxable under the Federal Income Tax is that Congress will undoubtedly increase the amount of taxes levied under the present or a future income tax law. So holders of *municipal bonds* are not now or likely to be *disturbed* by an *income tax*.

SECOND: The growth of cities and smaller communities is one cause for numerous receiverships among traction companies. The sacred nickel fare for a local trolley ride still obtains, but the length of ride *increases* because the cities are *enlarging* their *boundaries*. Thus the transportation is sold at a *stationary* price while the *cost of producing* the transportation *mounts higher* and the quality of service improves.

Among steam railroads the extraordinary policy prevails of the National government, assisted by most of the States, reducing rates at a time of notable increased costs of labor and commodities. No wonder railroad receiverships abound and must increase if immediate relief is not granted.

But the incomes of municipalities are not limited by law, only the extent or amount of indebtedness. So when annual budgets are prepared the taxes are levied according to requirements. Municipal bonds are the only form of public securities in the United States by *unregulated incomes* and this is a strong reason for their purchase. Of course the obligations of industrial corporations are not included, but reference is made especially to steam and electric railway, gas and electric lighting and power bonds.

THIRD: The growth of American communities strengthens their credit. For instance you buy the fifty year bonds of a growing city of say 10,000 population and long before maturity your bonds are the obligation of a city of say 50,000 and the purchaser enjoys the profits accruing from the higher credit of the larger city. Strange, but the *growth* of cities which *improves* the position of *municipal* bonds indirectly causes defaults among public utility bonds.

FOURTH: The merits of municipal bonds are being recognized by some of America's greatest life insurance companies. Their purchases of municipal bonds are increasing and two of the biggest companies have established special departments for the purchase of municipal bonds.

In conclusion, history and the experience of many investors demonstrates that municipal bonds are the *safest form* of *investment* in America.

Protection By Law

For Investors in

Canadian Municipal Bonds

By E. G. LONG, of Toronto, Canada. Member of the Ontario Bar.

PRIOR to the outbreak of the War, London was the chief market for Canadian Government and Municipal securities, and no Colonial or Foreign Securities were in greater favor there. Since the War began, however, the tremendous loans made by the British Government to finance the War and assist her allies, and the consequent embargo on new capital issues for other than War purposes, have for the time being rendered the London money market unavailable. Naturally bankers and investment houses in the United States have not been slow to take advantage of the situation, and as a result many millions of Canadian securities, in the last few months, have found their way into the strong boxes of American investors. The following table compiled by The Monetary Times of Canada shows the percentage of the total issue of Canadian high grade securities taken by the United States in recent years.

1910	1.5%	1912	11.3%
1911	6.5%	1913	13.6%
1914	19.7%		

From about the beginning of December, 1914, to the middle of May, 1915, the total taken by the United States is believed to be over $80,000,000, or about 57% of all Canadian issues in that period aside from special advances made by the British Government for war purposes. At present the American investor can increase his income considerably by investing in Canadian municipals. The article by Mr. Long is particularly interesting at this time in showing the protection afforded investors by the law. For the reproduction of this article we are indebted to A. H. Martens & Company.

THE DIVISION of legislative jurisdiction between the Federal Government of the Dominion of Canada, and the provincial governments, is determined by the British North American Act which formed the Dominion. Under this act, exclusive jurisdiction in connection with municipal matters, is vested in the legislatures of the various provinces.

With the exception of the maritime provinces, comprising New Brunswick, Nova Scotia and Prince Edward Island, all the provinces in the Dominion have enacted a more or less elaborate code of municipal laws regarding the borrowing of money by municipalities, the issuing of debentures, the imposition and collection of taxes, and the method of procedure to enforce payment of municipal obligations.

In briefly sketching the provisions of these statutes relating to municipal debentures, the following summary refers only in general terms to the existing laws, and of necessity the specific statutory provisions obtaining in each province, have not been dealt with. To do so with anything like completeness would require a treatment of such length as to be impossible in the present synopsis.

In the maritime provinces practically all municipal borrowings for capital expenditures and the issue of debentures extending over a period of years, are governed by private acts passed in the case of each particular municipality authorizing the specific debt, and settling the terms thereof.

In the other provinces in the Dominion, municipalities have power to pass by-laws for creating debts and raising money by the issue of debentures for any purpose within the legislative jurisdiction of the council.

The principal objects for which debentures are issued include permanent improvements within the municipality, such as roadways, bridges and sidewalks; permanent works, such as the construction of municipal buildings, water works, sewerage works, gas works, electric light, heat and power works, and the erection of school buildings.

With some few exceptions, all by-laws providing for the creation of a debt which is not payable within the current year, must be submitted to, and approved by the ratepayers at a poll held in the same manner as at a general municipal election, before being finally passed by the council. This requirement imposes

a salutory check upon the council of a municipality, and prevents extravagant and reckless borrowing.

The principal exception to the requirement of the electors' approval is in the case of debts for local improvement purposes. Under this local improvement system, a municipality can undertake works which specially benefit abutting or adjacent properties, and charge the whole or a portion of the cost against the properties specially benefited by the work.

A large variety of public improvements can be carried out on the local improvement system, including the laying of sidewalks, pavements, sewers, water mains, extending and widening streets, and installing street lighting systems. The principle involved is, that where a certain section of the municipality is benefited by a work of this character, it should pay for the benefit received; coupled with the extension of the principle, that all these works indirectly benefit the whole municipality, and as a result the municipality should have, and in fact has, the authority to assume a certain portion of the cost.

Local improvement works are undertaken chiefly in one of two ways: On a petition signed by a majority of the property owners who will be assessed for the cost, or, on the initiative of the municipality, after notice has been given to all property owners to be assessed, and a majority of such owners have not formally objected to the work being carried out.

Municipal debentures are usually made payable in one of two different ways: On the sinking fund plan, or on the instalment plan. Sinking fund debentures are payable at a fixed future date with interest only in the meantime. The municipality is required to raise annually during the currency of the debentures, a sum which with the interest earned at an estimated rate of not more than four per cent. per annum, will in the aggregate produce sufficient to retire the principal of the debt at maturity.

Instalment debentures are payable in annual instalments of principal and interest; each instalment being made up partly of principal and partly of interest, in such sums that the amount payable in any year shall be equal to the amount payable in each of the other years, during the period for which the debentures run. In this manner a certain portion of the debt is retired each year, and the municipality is relieved from the responsibility of collecting, investing and retaining the annual sums collected, which, under the sinking fund principle, must be held until the debentures mature.

The term for which debentures can be issued varies in the different provinces. The maximum period runs from twenty to fifty years. Local improvement debentures must mature within the estimated lifetime of the work in respect of which they are issued. This estimated lifetime is certified by the engineer employed by the municipality to oversee the construction of the work. These limitations do not prevent the issue of debentures payable within a shorter term than the maximum above mentioned.

In most of the provinces, authority is given to municipalities to undertake short term financing by the issue of securities, commonly termed "Treasury Bills" or "Treasury Notes." These can be issued for two purposes:

First: When the municipality has authorized long term debentures, the sale of which they wish to defer, the short term securities are issued in anticipation of the sale of the long term bonds, and the latter are held as an additional security for the payment of the short term notes.

Second: In the case of local improvements municipalities are authorized to make temporary loans to provide funds to pay for the work during process of construction. When a work is finally completed and the exact cost ascertained, regular debentures are issued, and the short term securities are retired out of the proceeds of the sale of the bonds.

As a general proposition it can be said that municipal debentures are a direct obligation of the issuing municipality. As between the holder of the debenture and the municipality issuing them, such holder is entitled to look to the municipality as a whole for payment, and this applies even though the municipality itself is obliged to collect the money from only a certain portion of the municipality, as,

for instance, in the case of debentures issued for local improvement purposes, which the whole or a portion of the debt is collected from the properties which are directly benefited.

The total amount of the debenture debt which can be incurred by a municipality, and the method of computing this limit varies in the different provinces. In the province of Ontario it is fixed with reference to the total amount which a municipality must raise by taxes in each year. The Ontario statute provides that the annual rate which is imposed by municipalities for the purpose of providing funds to meet its general running expenses, and the amounts payable in each year for interest, principle or sinking fund, shall not exceed two cents on the dollar on all ratable property within the municipality. In calculating this rate, however, local improvement rates, and rates required to raise money for school purposes are excluded. In the other provinces the limitation is fixed with reference to a percentage of the assessed valuation of all taxable property within the municipality. This percentage varies from ten to twenty per cent.

The method of enforcing payment of municipal debentures is practically uniform in all the provinces. Should a municipality default in payment of the principal or interest or its debentures, the holder may sue in the provincial court and obtain judgment for the amount owing. If this judgment is not paid, a writ of execution is issued and handed to the sheriff, and if default continues after demand by him the sheriff is authorized to take the assessment roll of the municipality and strike a rate on all property shown therein, which will produce sufficient money to pay the judgment with interest and costs. Municipal officials are bound to collect this rate imposed by the sheriff and to pay the proceeds to him. It necessarily follows that the holder of any municipal debenture has as security all the ratable property in the municipality, out of which he can, in the last analysis, realize the amount of the debt represented by his debenture.

Hints for Investors:

SOME *general mortgage* bonds are much better than *first mortgage* underlying issues because they are a *direct lien* on the most important part of the road while the branch line bond may be a lien on an *unimportant* part of the system.

POSSIBLY some of the callable bonds of the companies which are doing such an enormous business will be paid off by redemption. It would be well to look among these issues to see if any such profits are possible. Bethlehem Steel refunding 5's are callable at 105. It is not without the range of possibility that some financing scheme might be arranged to do away with such bonds.

THE bonds of Southern railroads are well worth studying. During the past year, which has been their worst for a long time, prices have declined greatly. With every prospect of better times ahead some of the bonds are bargains.

BONDS of a company that has great stability of traffic and earnings are better for investment even though they may have a smaller margin of safety than others of companies where the earnings fluctuate greatly, one year the margin of safety being large and another year small.

DON'T jump into convertible bonds without first finding out *when* they are convertible into stock. Some of them are not exchangeable for months or years. A good deal can happen to the stock in that time.

BETTER buy a bond where the operating expenses are heavy than one where the capitalization is heavy. In the first case the expenses can be brought down when business is poor, but in the second instance the charges caused by heavy bond issues cannot be reduced to meet the conditions.

Bond Market Topics

How Much Switching from Bonds Into Stocks?

WITH ALL THE ADVERSE factors holding down the bond market both as to prices and volume of trading it would seem that there were quite enough. Bonds have been badly enough neglected without any artificial brakes being put upon the market.

Selling from abroad has been the damper on the bond market for months. Let the high grade bonds get up a point or two and along comes a shower of selling, apparently from abroad. At least if we were to accept the large number of *seller* contracts as evidence of the fact it is clearly established that a lot of the selling came from abroad. As a matter of fact a goodly amount of bonds were sold short earlier in the season under the guise of selling from abroad. The bond market has been vulnerable for a long time.

One consideration that has been generally overlooked in the softness of the bond market has been the tendency of people to sell bonds and go into stocks. Strange as it may seem, quite a little selling of high grade issues was put through lately so that people might go into war stocks. The process is usually reversed. Time and again in past history of the bond market people have climbed out of stocks to invest in substantial bond issues.

With everybody neglecting bonds and some even selling that they might go into stocks what could be expected except the sluggishness that has existed for months.

Only recently an active dealer on the floor of the New York Stock Exchange complained that he had large selling orders that he could not execute because of the scarcity of bids. His sellers he said wanted to get out of the bonds so that they might go into some of the popular war stocks.

Some day it will all be over and the good days of the bond market will return. The rush to get out of stocks to buy bonds will then be much greater than it is now to get out of bonds and into stocks.

Can the Preferred Stock Craze "Come Back"?

WHAT THE BOND dealers see going on in the stock market in the hungry public grasping after stocks reminds them of the great wave of preferred stock buying that swept over the country about five years ago. They are wondering whether that will happen again. Just now the public is busy buying the stocks on the list that yield them hardly more than a fairly good bond does, but which have "war orders" as a basis for speculation and the foundation for increased dividends.

After the full force of this war order buying has been spent and the buyers have discovered just about how much dividend they are going to get, it is a question whether it will not be possible to issue great quantities of preferred stock to head off the public from going into bonds. Possibly it will not be so easy as it was at that time when everybody was crying for more income because of the high cost of living, but which James J. Hill called the "cost of high living."

It would certainly be a sad day for the bond market if that were to occur again, for at that time some $400,000,000 of these preferred stocks, mostly 7% issues, were taken by the public without a word of question as to the wisdom of such an investment.

Two conditions existed at that time that are not prominent now—one, the cry for more income and, two, the higher prices of bonds so that their yield was low. Today, bonds are low, and, of course, the income from the better class is far below the yield on most stocks, but it is a little more satisfactory for the man who wants safety.

It is a nice question whether the present insatiable appetite for stocks will last so long and carry so far as to make it possible for the corporations to finance by preferred stocks again over a period of a year or two.

Certainly the appetite for stocks is whetted. It would be a better way than loading down with bonds or notes, but if they intended to pay the dividend it would cost much more.

PUBLIC UTILITIES DEPT.

The North American Company

A Neglected Opportunity in a Listed Public Utility Stock

By PAUL CLAY

ALTHOUGH the stock of the North American company has long been dealt in on the New York Exchange, it is but little known and less understood. It is, indeed, a stock which is difficult to understand except through laborious study; for the company is a holding concern which gives out no enlightening information as to its affairs. It publishes no consolidated income account or balance sheet, so that its own statements do not disclose either earning power or assets. Investors do not understand the stock because they cannot without first employing expert accountants to figure out from the statements of the subsidiary companies what North American stock is worth and what it is able to earn.

The annual reports of the parent concern have about all the objectionable features in the catalogue. So-called "gross income" instead of being the operating receipts of any company or companies, is merely the dividends and interest received. Hence its changes from year to year show nothing at all as regards the increase or decrease in the gross earnings of the whole system; and such increase or decrease is a very important consideration to the investor. The balance sheet shows nothing whatever regarding physical plants and properties owned, but in their place it gives the book value of the stocks owned. Neither current assets nor current liabilities can be definitely figured out from the parent company accounts, or from both combined.

For these reasons it must be admitted in advance that even at best the purchase of North American stock resembles in some degree the purchase of a piece of real estate which one has never seen. Nevertheless the good reputation of the company offsets to some extent the lack of information, and there is much circumstantial evidence to indicate that the subsidiary properties are managed well and in the interests of stockholders. Let us then proceed to estimate as best we may, the capitalization, earning power and assets and liabilities of the whole system, taken as a unit.

The North American Company itself operates no properties but merely acts as holding company and financier to a number of important public utility concerns. Among these the more prominent are: The Detroit Edison Company; the Electric Company of Missouri; the St. Louis County Gas Company; the Union Electric Light and Power Company; the United Railways Company of St. Louis; the Wisconsin Edison Company; the Milwaukee Electric Railway and Light Company; the Milwaukee Light, Heat Traction Company; and the Wisconsin Gas and Electric Company. Some of these are controlled directly, and some indirectly through the Wisconsin Edison Company.

For 1914 the annual report did not give full details regarding the securities owned, but as of December 31, 1913, the North American Company owned at par $7,975,000 bonds of its subsidiaries, together with $1,750,000 preferred stocks, and $42,356,692 common stocks. The stocks taken together had a book value of $26,170,809, and the bonds $7,260,579, making a total of $33,431,388 in book

values as compared with $52,081,692 in par values. Manifestly it is impossible for an outsider to accurately get at the net capitalization of the entire system, because a lot of the investments of the subsidiaries are carried as "investments and advances" which renders it impracticable to find out whether or not these are all stocks and bonds, or what is the proportion of bonds to stocks. Judging from the known facts, however, these facts being found mainly in the balance sheets of the subsidiaries, the net capitalization in the hands of the public including the whole system may be roughly estimated as in Table I.

clearly state their dividend payments, the fact that 6 per cent. is the general average rate paid by their preferred stocks is here used as a basis. It would be more satisfactory to estimate the earning power of North American stock by adding to the surplus for dividends of the parent concern the aggregate surpluses after dividends of all the subsidiaries, or rather the share of the parent in these surpluses. However, this is impossible, because of the lack of clear accounts on the part of some of the subsidiaries. Hence the above method had to be used.

In this computation the entire interest on all the subsidiary bonds, including

Table I—Capitalization in Hands of Public

Subsidiary bonds	$118,518,300
Subsidiary preferred stocks	18,936,500
Subsidiary common stocks	10,000,000
Total above	$147,454,800
North American Co. stock	29,793,300
Aggregate capitalization	$177,248,100

Of course the reports state the amount of the security holdings at book values of the parent company itself, but in arriving at these estimates of net capitalization in the nands of the public, one has to allow also for the holdings of the subsidiaries of the stocks and bonds of each other. This complicates the problem to the point where accuracy is impossible; but it is not likely that the above estimate is far enough from the truth to prevent one from arriving at a fairly correct valuation of North American Company's stock. As a basis of this valuation one may take the aggregates in Table II for the nine leading subsidiaries.

The net income here shown is the net after depreciation and taxes, and the stocks and assets and liabilities are of course those of the subsidiaries only. We shall observe in a moment that the parent company shows a considerable excess of current assets over liabilities. Considering these facts, together with the above estimates of net aggregate capitalization, we may now arrive at an estimate of the real position of North American Company's stock. Its true earnings available for dividends may be estimated as appears in Table III.

Since some of the subsidiaries do not

those held by some of the companies in the system, and also the total preferred dividends on all the subsidiary preferred stocks, are deducted in figuring the balance available for common stocks. But the share in these interest and dividend payments belonging to the parent concern, is later added in when computing the income of the parent concern. The parent company holds only $5,189,899 of bonds, but there is here added into its income 5 per cent. interest on $15,146,900, since this is the estimated amount of bonds of the system held by one or another of the companies in the system, and since this interest received by all accrues directly or indirectly to the benefit of the parent concern. The preferred stock dividends are treated in like manner.

Thus the available figures indicate that the earnings of the entire system which should really be credited to the stock of the North American Company in 1914 were $4,635,881 instead of merely $1,908,772. This difference is not a misrepresentation on the part of the management at all; for the accounts cannot include in the income of the parent company any portion of the earnings of the subsidiaries except that portion which it

actually receives as interest or dividends. What we have done is simply to credit to the parent concern its proper share as nearly as can be estimated of the undivided surplus earnings of the subsidiaries. The case is exactly parallel to those of New York Central and Pennsylvania Railroad stocks which do not show nearly their full surplus earnings simply because these earnings are accidentally but literally concealed in the treasuries of the subsidiary companies.

In short, the evidence is that North American stock instead of earning 6.43 per cent. last year really earned about 15.56 per cent. That it does not sell higher in view of these large earnings is due chiefly to its low dividend rate of 5 per cent. and to the fact that its large earnings are not known to the investing public. The public judges the stock by working capital—of $4,685,069. Probably, however, this is only a bookkeeping fiction, for the principal item of current assets of the parent concern which owns all the net current assets is "loans and advances" $5,841,672. Now these loans and advances are undoubtedly loans to the subsidiaries, and not real assets which could be realized upon. If they are advances to subsidiaries then the fact that the subsidiaries have no net working capital would if established prove that the whole system has none. Of course the whole question is somewhat uncertain because of the impossibility of tracing inter-company obligations.

A policy of the management which should help to build up the value of North American Company stock is that of making substantial depreciation charges. These last year totalled $3,882,-

Table II—Estimated Statistics of Subsidiary Companies

Gross operating earnings	$41,183,778
Total net income	13,273,345
Interest charges	7,451,559
Surplus for dividends	5,821,786
Aggregate indebtedness	133,665,200
Preferred stocks	22,436,500
Common stocks	82,484,167
Current assets	12,346,832
Current liabilities	13,294,979

the 6 to 7 per cent. earnings shown on the face of the reports. Other reasons are that there have been rapid changes in the properties belonging to the system; that the system itself is so objectionable in architectural form; and that it has been necessary to hold back a large share of surplus earnings from the public view in order to build up working capital. Lack of working capital is presumably another strong reason why the stock does not sell higher.

It is improbable that the entire system has any real net working capital. The nine principal subsidiaries taken together show current liabilities of about $13,294,-979 against current assets of only $12,346,832. To be sure the North American Company itself shows such liabilities of only $1,896,967 as compared with $7,530,183 current assets. Thus parent and subsidiaries combined appear on the books to have a net excess of current assets—otherwise called net 435 for the principal subsidiaries. To be sure, the book valuation of the principal plants and properties is in the aggregate $214,739,007; but plants are usually overvalued so as to offset on the asset side of the balance sheet the water in the capital stock on the liability side. Probably $125,000,000 would be a liberal estimate of the real value of the physical properties of the whole system; and upon this valuation the above depreciation charge is equivalent to 3.1 per cent. For properties of this kind both maintenance and depreciation can be covered with an amount equal to 5 to 7 per cent. on the true value of the plants; and this depreciation charge no doubt is exclusive of the maintenance expenditures—the latter being included among general operating expenses. The meat of the matter is that the properties seem to be well cared for and that the earnings available for dividends are more genuinely available than is usually the case.

Now we have the situation in a nutshell. It is that North American Company's stock appears to be making earnings of more than 15 per cent., and to have a very promising future. This promise is somewhat deferred by the lack of working capital, and by the heavy obligations ahead of the stock. If our estimates are substantially correct, these prior obligations consist of $118,518,300 subsidiary bonds, and of enough subsidiary stocks to bring the total up to $147,454,800. Even the subsidiary common stocks rank ahead of the parent company stock, because the parent concern is a holding company and must derive its income chiefly from the dividends paid by the subsidiary stocks.

The exact amount of subsidiary common stocks in the hands of the public is not shown, but it is known that the parent concern owns only about $18,400,000 out of the $25,000,000 United Railways of St. Louis, and also that it owns only 186,003 shares of the 215,000 shares of Wisconsin Edison stock. The latter has no par value which additionally complicates the matter of figuring the net capitalization of the whole system.

In brief the indications are that the companies in the North American system are earning such a large surplus over dividends that an ample working capital can be accumulated within a reasonable time. Then the investing public may some day be surprised by a big increase in the dividends on the stock and by a big rise in the stock itself.

Table III—Estimated Consolidated Income Account

Total net income of subsidiaries (9 companies)	$13,273,345
Aggregate interest charges of same	7,451,559
Surplus for dividends of same	$5,821,786
Minus pref. dividends of 6% on $22,436,500 subsidiary pref. stock	1,346,190
Balance for subsidiary common stocks	$4,475,596
Minus share of public in these common earnings	559,500
Available for North American Co.	$3,916,096
Plus 5% on $15,146,900 inter-company bonds	757,345
Plus 6% on $3,500,000 inter-company preferreds	210,000
Total available for North American Co.	$4,883,441
Minus expenses of North American Co.	247,560
Available for North American Co.'s stock	$4,635,881

Bond Inquiries

Rock Island Debenture 6s

What would you say as to the position of Rock Island debentures?—J. A. M., Mass.

Since the Rock Island has been placed in receiver's hands, there has been an argument in the court between contending interests as to whether it was the proper course to pursue. Up to this time no final decision has been rendered in the matter, but the receivers are going ahead and administering the property. There is every possibility that the stockholders will have to meet a substantial assessment. Some weighty arguments have been brought to show that the road should be in receivership. The debenture bonds may suffer severely if the receivership is confirmed, but the refunding bonds look to be pretty safe, either from scaling or from assessment. To buy them now, however, is to buy into a receivership with all the chances that involves.

Bonds With a Good Yield

Will you suggest a few listed railroad bonds netting from 5 to 6½ and industrial issues netting from 5% to 7%.—F. R. T., Neb.

We would advise you to buy the bonds of the Kansas City Southern Ry., Chesapeake & Ohio, Baltimore & Ohio and Erie. Industrial bonds suitable to your purpose are American Agricultural Chemical 5s of 1924, Lackawanna Steel 5s of 1950, Illinois Steel debenture 4½s, York Air Brake 1st convertible 6s of 1928.

Part Three of a Valuable Series

What the Investor Should Know

About

A Public Utility Company

Nature of Stocks—Points to Observe in Judging

By HENRY JUDSON

STOCKS ARE STOCKS, and about all the ordinary investor inquires about them is the price, earnings and dividend payments. This is the principal reason why the investor loses money on a quarter to a half of his purchases. These three items do not make a good beginning toward finding out the real nature of a stock. If a borrower were to offer a note for sale, no one would ever think of buying it without first investigating the credit of the payer; and this credit is largely a question of his indebtedness and his working capital. Now there is no charm in the lithographing of a stock certificate which can make it so much more reliable than an individual—that it need not be investigated before buying.

With stocks, as with notes, there is the greatest variety in character. There are notes of wealthy and substantial business men carrying two or three names; there are others carrying only one name; and there are still others signed by men of no financial responsibility, or even by women and minors. Thus a note may be worth either its face in gold, or it may be worth no more than a fraction of a cent avoirdupois. Exactly the same thing is true of stocks, and in order to discriminate, it is necessary first to look at the character or kind of the payer, otherwise known as the issuing company. Among these companies six of the leading kinds or types are shown in the accompanying table.

The great importance of these various forms of ownership or kinds of companies may best be illustrated by carrying out the comparison between a stock and a note. To be sure, a stock carries no legal obligation to pay, but it does involve a moral obligation to pay, and its value lies in its implied promise to pay if possible. The six similes, then, illustrating the differences between the stocks of the above types of companies are these:

Number 1 is the case of John Doe who directly earns money from business operations and gives you his personal promise to pay. Number 2 is the case of John Foe who while not engaged in commercial operations himself, controls and finances a number of partners who are so engaged, and informs you of the earnings and resources of himself and all his partners. Number 3 is the case of John Goe, who is not engaged in productive business, but merely controls and finances partners who are, and informs you, the noteholder, of the earnings and assets of himself and his partners, but does not tell you what proportion of these "assets" represents moneys due from the partners to each other. Number 4 is the case of John Hoe, who does no productive business but merely controls partners who do, and informs you of his partners' earnings and assets, but not of his own. Number 5 is the case of John Joe, who does no productive business and expects you to buy his note even though he tells you nothing but generalities about either himself or his partners. Number 6 is the case of John Koe who does no productive business, and controls no partners who do any, but still expects you to buy his note even though his sole occupation is speculating in securities.

The conclusions to be drawn from these descriptions are too obvious to need enlargement, and it is perfectly easy for anyone to apply them to the stock of any company. It is necessary only to look up the company in any of the well known financial manuals and read a few paragraphs to find out how the company is constituted, and to which of these six

classes it belongs, an easy matter.

Second in importance in determining the nature of stocks is the question of indebtedness. One should know the amount of indebtedness which a company has to take care of in advance of dividends, and also the kind of the debts and the possibility of their being unduly increased. There might be mentioned six classes of companies, arbitrarily subdivided according to the amount and kind of their debts. The strongest is here named first and the weakest last.

1. Those having no bonds, notes or other debts.
2. Those having small direct debts consisting of closed mortgages.
3. Those having moderate debts of closed mortgages.
4. Those having moderate debts with large amounts of authorized and unissued bonds or notes.
5. Those having large debts, of closed mortgages.
6. Those having large debts with large amounts of authorized and unissued obligations.

issued in large enough amounts to materially reduce the surplus tor dividends.

Regarding this question of indebtedness, a good way to judge the quality of a public utility stock is from the income basis of the bonds or notes of the same company. If these obligations of the given company habitually sell in the market at prices to yield 4½ to 5¼ per cent., this in itself is pretty sure proof that the company is financially strong and that its stocks are desirable either for the present or for the future. If, however, the yield of the bonds and notes is 5¼ to 5¾ only a fair degree of strength is indicated. If the current yields run from 5¾ to 6¼ per cent. it is an indication that the company is financially weak, or else that it is so young and undeveloped that its securities are highly speculative. If the yields exceed 6¼ per cent. the indication is that the credit of the company is decidedly poor, and that its stocks are probably either without any value, or else with no value except as a pure gamble.

From this point of view it is a wise plan for stockholders to keep records of the prices of the bonds of the companies in which they are interested. This is still true even if the stockholder has absolutely no interest in the bonds; for the fluctuations of the letter give excellent indications as to the future of a property. Especially is this the case with a company which gives no real information to its stockholders. It sometimes happens that even while the stock holds firm, the bond of the same company shows persistent weakness; and this should almost invariably be taken as foreshadowing a slump in the stock.

For similar reasons it is good policy to make and keep a collection of bond circulars wherein new bonds or notes of the given company are originally offered for sale. Not only does the income basis of the offering pretty clearly reflect the

Six Types of Public Utility Companies

1. **Operating company, furnishing enlightening reports.**
2. **Holding company, giving consolidated reports.**
3. **Holding company, giving parent and subsidiary reports only.**
4. **Holding company, giving subsidiary reports only.**
5. **Holding company, giving no enlightening reports.**
6. **Investment company, giving only formal reports.**

A little consideration shows the great importance of the amount of indebtedness ahead of a public utility stock. Many street railways, for example, save about 25 per cent. out of their gross earnings, to be used as a surplus for dividends. In such a case a 5 per cent. loss in gross on the part of a company having no debts would diminish the surplus for dividends by only 20 per cent. of itself. But a 5 per cent. gross loss on the part of a company having a debt equal to its capital stock would diminish the surplus for dividends by about 40 per cent. The character of the debts themselves is also important. For example, a closed mortgage or a lot of treasury bonds held for future use do threaten future dividends because in this case additional bonds may at any time be

credit of the company, but after the offering has been absorbed by investors the movements of the price of the bond show whether the company is making good or not.

A slight decline from the flotation price is no indication that the company is not making good, or that its stock is not a good purchase, because slight declines are the general rule. The merits of new bonds are fully exhibited and explained and generally over-estimated, whereas no one has any pecuniary interest in setting forth the merits of old seasoned issues. Hence the investor is unduly impressed with the attractions of a new issue, while he quite fails to see the greater attractions of old seasoned bonds; and for this reason the new bond after being once floated usually sinks two to five points below its flotation price.

Hence a rise of a quarter of 1 per cent. or thereabouts in the income basis of a new bond is no reflection upon the stock of the same company. But if the rise exceeds a half of 1 per cent. it may usually be taken to mean that the prospects of the company when the bond was floated were over-estimated, and that the company is not making good. Going still further, if without any material change in the situation of the general bond market, the income basis of the given bond rises a full point or more, the stock cannot be sold too quickly. Such a rise would almost certainly mean that the prospects of the company were vastly over-estimated.

In brief, public utility investors can save themselves from a very large number of losses by getting away from the mere question of price, earnings and yields, and looking closely at the nature of the stocks they buy.

Public Utility Inquiries

Gary and Interurban

Would you recommend paying the assessment on Gary & Interurban?—J. B.

We see no future for the stock, so that paying the assessment would probably be sending good money after bad.

Interborough Consolidated

T. M.—We find that no annual report for Interborough-Metropolitan Co. for the year ended June 30 has yet been issued. There was an 11 mos. statement given up to May 31, showing that on the preferred 7.3% was earned. You doubtless know that the company now is the Interborough Consolidated. The new company takes over approximately $3,000,000 notes so that there is not likely to be any attempt to pay dividends until these notes are paid off. We are not impressed with the investment position of this common stock.

Marconi

There is $10,000,000 capital stock of the Marconi Wireless Telegraph Co. of America authorized and outstanding. The stock is all of one class, no preferred. Par value of this stock is $5. An initial dividend of 2% was paid on Aug. 1, 1913. The company has issued no bonds.

In the year ended Dec. 31, 1914, surplus for stock was $149,878. Earnings are said to be running at last year's level in spite of the interruption of trans-Atlantic service, due to the war, and this indicates that the business of the company will reach new levels after the war. Due to operating expense of the new high power stations on the Atlantic and Pacific coasts, which may exceed earning power of these stations temporarily, the board decided to pay no dividend in 1914 and is not expected to make another declaration for at least several months.

American Marconi is controlled by the parent company, Marconi's Wireless Telegraph Co., Ltd., which owns 566,826 of the 2,000,000 shares of the American company, with other substantial holdings by officers of the company.

United Railways Investment Co.

L. N.—It is rather difficult to advise what disposition shall be made of your stock of the United Railways Investment Co. There seem to be bad and good elements about it. Jitney and other troubles are bothering the San Francisco surface lines. Some of the good things are that the subsidiaries of the investment company are doing very well, putting money back into their property, and making progress generally. It looks like a tug-of-war between these two opposing forces. We should say the weight of influence is with the hopeful and constructive side.

Notes on Public Utilities

American Railways. — QUARTERLY dividend reduced from 1¼% to 1% because of depressed business conditions in territory served. Gross earnings of the subsidiaries in the first half year decreased $100,000.

American Telephone & Telegraph.—REPORTED English holders have been selling stock. Continues to solidify operating system.

Brooklyn Rapid Transit.—GOVERNOR FOSS denies being heavy seller of stock, and says directors had not considered dividend reduction. In fiscal year ended June 30 Co. earned $1,000,000 above dividends.

Columbia Gas & Electric.—BALTIMORE officials favor plan to pipe gas from West Virginia fields to Baltimore, but are opposed to distribution of natural gas in city except through means of Consolidated Gas, Electric Light & Power Co.

Commonwealth Power.—YEAR ended June 30 shows 6¾% earned on $18,000,000 common; balance after dividends, $595,000.

Cities Service Properties.—BROKE earnings' record in year ended July 31, with a gross of $20,256,000. Earnings on stock made high record of 11.84%.

Detroit United. — DIRECTORS sent letter to stockholders outlining city's proposition to take over city lines, and assume $24,900,000 bonded debt. Offer was not accepted because city refused to place its credit behind bonds. Present plan allows purchase price to be fixed by circuit court, with right of either party of appeal to the State Supreme Court.

Interborough Rapid Transit.—EARNED 23% upon its $35,000,000 stock in 11 months ended June 30, compared with 22.9% earned in previous fiscal year.

Kansas City Railway.—FEDERAL court at Kansas City will pass on reorganization plan, which provides for an indebtedness allowance of $28,700,000 for all present companies, which is to be borne by two new companies.

Mexican Telephone & Telegraph.—LACK of exchange facilities rather than poor earnings reason for company's default on two bond issues. Majority of bond holders have deposited their bonds in accordance with proposed plan. Earnings running at rate, which, under normal conditions, would cover the bond interest and show 5% on the preferred and 10% on the common stock.

Manufacturers' Light & Heat.—GROSS earnings for 6 months ended June 30 were $390,000 less than for the same period of 1914, but balance for dividends was at the rate of 11.8% on stock per annum.

Montana Power. — CONSTRUCTION work on Great Falls Dam completed. Co. ready to furnish power to St. Paul railroad for its electrified system under contract calling for delivery of power by October 15.

New England Telephone & Telegraph Co. —SIX months to June 30 show station growth of 3.33% against 4.75% in 1914. Gain in gross receipts slightly less than 5%, against gain of 6.9% in 1914.

Northern States Power.—IN year ended June 30 gross increased $517,683, and net $430,377. Balance for depreciation and dividends equal to 9.45% on common stock.

Pacific Light & Power.—GROSS earnings six months ended June 30, $1,383,000; gain of $109,000 over first half of 1914.

Pacific Gas & Electric.—FIRST half year showed gain in earnings, and full year expected to show a $1,500,000 increase in gross over 1914.

Philadelphia Co.—REPORTED that New York banking group is negotiating to acquire the block of French and English stock holdings.

United Gas & Electric.—HAS anticipated payments to June 1, 1914, on 3 year 6% collateral notes, leaving $4,500,000 outstanding.

United Railroads. — UNITED RAILROADS of San Francisco earned $682,000 gross in July, an increase of $11,507 over July, 1914. Gross earnings for the year ended June 30 were about $482,000 less than the year previous. Law passed by city limiting operation of "jitneys" has aided Co.

United Railways & Electric Company of Baltimore. — CO.'S two subsidiaries, the Baltimore Transit Co. and the City Motor Co., formed to operate motor busses, has reduced number of jitneys from 140 to 60.

Utah Securities Corp.—ACTIVITY in mining and smelting industry helps earnings of subsidiaries. July gross total $413,000, increase of $26,000 over July, 1914. Gross for the 7 mos. ended July 31 totaled $2,680,000, a gain of 1% over the same 7 months in 1914.

RAILWAYS & INDUSTRIALS

The Market Outlook

Foreign Selling—Situation in Europe.

EVERY drop to a new low for foreign exchange—and at this writing it has reached the phenomenal figure of \$4.55—brings up again the question of foreign selling of our securities.

The English seller of our stocks or bonds now gets a premium of over 6 per cent. on his sale as a result of the abnormal exchange rate. It is unnecessary to say that on many inactive securities such a profit is very attractive—greater, in fact, than the holder would be likely to get in any other way. It forms a strong inducement for him to sell, and patriotism also urges him to dispose of his Americans and put the money into the war loan.

In fact, this is what he is doing, in a slow but methodical way. There has been a constant dribble of foreign selling here throughout 1915 to date. Only occasionally has it become heavy enough to have a noticeable effect on our market at any one time, but the cumulative effect of it has been considerable.

This selling has had the greatest effect on our bond market, because there has been scarcely any speculative demand for bonds to offset it, and because a 5 or 6 per cent. profit on a bond is a good deal bigger in proportion than the same per cent. of gain on a stock; but it has also been an important element in preventing our standard railway stocks from rising at a time when many conditions have favored higher prices for them. On every little bulge in the rails a few foreign holdings have been passed out and have remained as a permanent load on the market.

* * *

THE individual foreign investor has, it is true, some good reasons for holding his American securities, as well as strong inducements to sell them. They are now not only the best securities in the world to hold, but they form the only large class of investments that are attractive under the generally demoralized conditions that have resulted, and are likely to result still more as time passes from the war. For that reason it is to the interest of the foreign holder to cling to our securities in preference to many others.

It is not likely, however, that this argument appeals very strongly to the British investor as affecting an exchange of Americans into the war loan. Very few Englishmen will have any serious misgivings as to the safety of a British government bond, even under the strain of a world war.

Moreover, it is to be remembered that there is now a much better market for Americans than there is for the securities of other non-European countries, of which Englishmen hold a great quantity. London has been the world market for many South American, African and Asiatic securities, and it is not now possible to sell many of these securities in South America, Africa or Asia. But American stocks can not only be sold, but they can be sold on a rising market; and our bonds, while not advancing, have nevertheless had a ready market without any serious decline.

* * *

FOREIGN governments have to be considered in this problem, as well as the individual foreign investor. Both the French and English banks are making every effort to gather in American securities and ship them to this country. These efforts are likely to increase as the pressure of the war grows heavier.

The whole question of foreign exchange is now the question of the ability of Europe to pay its debts on demand. The currency of none of the countries at war can now be claimed to be on a gold basis. The low rate of exchange very largely represents the discount at which foreign money is now selling as measured in gold.

England, France and Russia owe us a tremendous balance for goods sold to them. While they are sending us some gold, they cannot possibly spare enough

to balance the account. How can it be done? It could be done by placing a great quantity of foreign government bonds in this country; but it is a question how many foreign government securities our investors would be willing to buy under the present uncertainties. The single fact that none of the warring countries is now on a gold basis is enough to make our investors wary of such foreign issues. If they could be sold here at all in large quantities, it would be necessary to set a very low price on them, which would be discouraging to foreign investors who have paid a higher price and in a sense would be unfair.

If Europe cannot balance its account with us in gold, and cannot sell its own securities here to advantage, there are only two other courses open to foreign bankers. One is to get hold, if possible, of a great quantity of American stocks and bonds and ship them over here. The other is to let the exchange rate decline still further, thus adding to the premium which the foreign holder can get by selling his Americans back to us, and at the same time exerting a strong influence to check our exports to Europe.

* * *

IT will be seen that, no matter which horn of the dilemma Europe seizes, further sales to us of our securities now held abroad are almost unavoidable. It seems clear that such sales must eventually become still heavier than they have been so far. The nations of Europe are in a veritable death grapple. It is not likely that peace can come until they are pretty nearly bankrupt, temporarily at any rate. They will have to strain every resource almost to the breaking point. And *their most available resouce* is found in foreign holdings of our securities, so far as the foreign investor can be induced to part with them.

* * *

WE emphasize this matter not because these continual slow sales of securities from abroad are likely to overwhelm our market or to result in any repetition of the panicky markets of last year. We are abundantly able to buy back all the stocks and bonds that Europe is likely to offer us, and we are getting them, generally speaking, at bargain prices. But these steady, and we fear increasing, sales will form a serious obstacle to any continuous rise in our prices. Every advance here adds to the inducement for the foreigner to sell. The result is that a bull market meets an increasing load to carry as it goes up.

That is perhaps the principal reason why our recent advance has been so largely confined to the specialties, which are not held in Europe to any such wide extent as our so-called standard securities. Stocks of the specialty class can be marked up without meeting resistance from abroad. Therefore it has been in them that the fundamentally bullish condition of American business has found its expression, rather than in the class of securities which has heretofore afforded the best measure of investment conditions.

* * *

FOR several months past, excitement in the war stocks has led those interested in the market to hastily brush aside all such considerations as above outlined. But every such big public speculation eventually reaches its limit and when that time arrives, if it has not already come, sober second thought will lead the investor's mind back into more accustomed channels. He will begin to wonder if we haven't been going a little too fast and too far and taking a little too much for granted.

The specialties which have been so enthusiastically boomed recently are of all degrees of merit. It is entirely possible that for some of them war profits will be sufficient to justify the highest price at which their stocks have been sold. But there are others which are not in this happy position and which have advanced by the aid of the usual machinery of speculation. In these latter issues there has been a great shifting of certificates from investors who have held them for years to speculators who wish to hold them only long enough to get a chance to sell them to somebody else at a higher price. In such stocks the situation is now far from healthy.

The American Woolen Company

How the War Has Over-Ruled the New Tariff.

By CAMERON ROBERTSON.

THE AMERICAN WOOLEN COMPANY common stock has not been generally thought of as a "war issue," and yet as surely as securities of steel, equipment, munition and other companies have felt the results of the European conflict, so should this stock be affected. Like many other industrial corporations, two things have been accomplished for this company by the war—first, the evil aftermath of the new tariff legislation of 1913 has been totally offset for the present and probably for years into the future; second, the company has received a very large volume of orders for its products for use of the armies across the Atlantic.

The American Woolen Company owns and operates, or controls through subsidiary companies, over 50 mills manufacturing woolen and worsted cloth, blankets and similar products of wool. As the largest factor in the industry in this country and one of the largest in the world, it has always taken a keen interest and a prominent place in all tariff agitation. Woolen and worsted goods manufacturers in this country pay higher wages for their skilled and unskilled labor than do their European competitors. The exact difference in wage is in dispute, but that pay is higher here is admitted excepting by the blindest "free traders." As a result, members of the industry in the United States have fought hard every time the tariff question came up. Before the tariff legislation of the Taft administration, the "high tariff" advocates for woolens claimed too much and fought so hard for their claims that they won. As a result, the legislation passed at that time contained what even its advocates of that day, or many of them, now admit was an "Indefensible Schedule K." The protection given on woolens and worsteds was so large that it just naturally invited too sharp a downward revision when the Wilson administration started their revision of the tariff in 1913. The tariff on manufactured products of wool was accordingly cut to 35 per cent. ad valorem. This was claimed to provide adequate protection for manufacturers in this country, but the experiences of the trade since the new law went into effect and until the outbreak of war proved the contrary. From the time the new law was in force until well into the fall months of 1914, importers made huge sales of foreign woolens and worsteds in the United States even though domestic manufacturers had cut their prices to a figure where profits were impossible. Advance sales for what would have been imports through the past year by importers were so large that it was common gossip in the trade that many little manufacturers would not have been able to have kept going another year, and that larger units would have no profits but actual losses. A very large part of this foreign business was cancelled following the outbreak of war.

Such was the situation which existed and would still exist if it were not for the other circumstances brought up by the war. In brief, these were—(1) the shutting down of many textile factories in Europe, whose product was only of use for civil consumption, because of lack of labor, shortage of capital or loss of markets; (2) the sale for months and even years ahead of practically all the products of many European factories which could make blankets, uniform cloth, etc., for wear by the soldiers; (3) the cessation of imports and the start of an export movement of very large proportions in American manufactures of wool for use of the armies; (4) great rise in prices for all products.

The American Woolen Company has received its share, if not more than its proportionate share, of the large orders for textiles and blankets which have been placed in this country. Furthermore, the outlook is for many more large "war orders" for it. The 20,000,000 to 30,000,000 men in arms in Europe are

about to start on another winter campaign, from all appearances. Uniforms, overcoats, blankets, etc., are used up very quickly. Between wear and tear of an unusual kind due to trench fighting, filth, blood from wounds, burning due to or to prevent disease, and many other causes which brevity demands shall not be mentioned in detail, the life of a uniform is estimated at four weeks and of an overcoat at five weeks. Furthermore a large proportion of the millions of men who must be continually supplied with new wearing equipment are peasants who normally figure as small consumers of wool manufactures.

These factors have caused a great advance in raw wool prices, but it is reported that the American Woolen Comany purchased very large quantities of raw materials before the greater part of the advance in prices had been seen. Even if it purchased its wool at present market prices, the current demand for manufactured goods has made prices far higher in proportion than the advance in raw materials. Dye materials in the United States are scarce and highly expensive, although the growth of a domestic dye industry promises to remedy the situation before long. President Wood of the American Woolen Company as recently as the first week of August, 1915, stated that the company had a sufficient supply of standard dyes on hand to run its mills at capacity for nearly a year.

With this explanation of the general situation in the woolen goods industry and its effects on the business of the American Woolen Company, an analysis of its earnings in past years takes on a different aspect. The accompanying table shows what these have been (for the year to December 31).

This statement of earnings tells a plain story. It shows that in 1910, 1911, and 1912, under the old tariff the company could have paid small dividends on the common stock each year. It shows drastic losses in 1913 due to the new tariff. Probably if the income account, for the period in 1914 before the war, was obtainable it would show that an even larger loss than in 1913 was experienced, but before the end of 1914 there were a number of large war orders booked and the situation had changed so that for the year the company stood about even after paying its preferred dividends. Using the 1913 figures as a basis for the first half of 1914, this would indicate that for the first six months of 1914 there was a deficit after preferred dividends of $1,738,842. As all but $11,398 of whatever loss was experienced in the first half year was made up for by December 31, using such figures this would indicate net for the second half year of over $1,700,000. This figure, however, is probably too conservative as representing the present net income rate. In the first place, all of the benefit of war orders was not possible by the end of 1914, and furthermore it is known that chaotic conditions existed in the woolen goods trade immediately following the outbreak of war. It is probable that a monthly income report of the company would show deficits through October of 1914—hence the November and December earnings alone probably made up for losses in ten preceding months. In such an event, the company may be running well above $5,000,000 a year net at the present time. In fact there are some indications that such a figure is too low to use as a basis for figuring probable results for the common stock.

At the present time, the American Woolen Company has $40,000,000 per cent. cumulative preferred stock and $20,000,000 common, with no funded

American Woolen Co.—Comparative Statistics

	1914	1913	1912	1911	1910
Net	$2,788,002	$677,685 (def.)	$3,722,988	$3,225,916	$3,995,310
Pfd. Div.	2,800,000	2,800,000	2,800,000	2,800,000	2,800,000
Deficit	11,398	3,477,685	......	......	......
Surplus	......	......	922,988	425,916	1,195,310
Deprec.	......	502,106	504,735	......	538,664
Yrs. Def.	11,398	3,979,791	......	......	......
Yrs. Surp.	......	......	418,253	425,916	656,646

debt of its own, although being liable as to principal and interest for some subsidiary obligations. The latter are well taken care of by the subsidiary, so that the only deductions to be made from net before the common are for preferred dividends and for depreciation. Preferred dividends have been paid regularly as due since organization, so that there is no back debt on that account. Allowance of $2,800,000 for preferred dividends and $500,000 for depreciation from $5,000,000 net leaves a balance of $1,700,000, or 8½ per cent., for the common. As has been said, the figure used for net is probably too conservative, so that it is more probable that the company will have above 10 per cent. on the common stock for 1915.

The company's balance sheet reveals that there was $8,024,436 surplus as of December 31, 1914, which makes the book value of the common stock $140.12 per share. This large surplus also paves the way to dividends whenever directors feel so disposed towards the common stock.

bank loan (representing money borrowed for short terms against purchases of raw materials, etc.), $4,306,016 current liabilities and $583,333 accrued dividends. The items bank loans and current liabilities each show large expansion over those of the year before, but this is explained by the tremendous expansion in business which took place between the end of 1913 and the end of 1914. A study of the balance sheet as a whole reveals that the company is very strongly intrenched. Its larger items of floating debt and current liabilities are very satisfactory evidences of expanding business. The large sum in assets for inventories represents the value of raw materials on hand December 31, 1914. In the intervening period, raw wools and dyes have advanced so much in value that it would have been possible for the company to have sold out all of its materials at a handsome profit. As it is, the company has plenty of dyes at a time when a number of its competitors have had to close down or curtail operations because of lack of such. Hence the large item "inventories" is a most satisfactory exhibit from the viewpoint of nine months after its publication.

Price Range for a Series of Years

	1910		1911		1912		1913		1914		1915 (to Aug. 24)	
	high	low	high	low	high	low	high	low	high	low	high	low
Pfd.	104	90⅛	96¼	85¼	94½	79	82	74	83	72½	94¾	77¼
Com.	39½	25¼	36½	25½	31	18	23⅛	14½	20⅞	12	38½	15¾

The balance sheet is furthermore made up of $45,181,499 plants and investments, $18,329,949 inventories, $15,146,328 receivables, and $999,300 stock of subsidiaries and $1,013,409 cash. The cash position is low for this company, but at the period around December 31, 1914, the company was in the midst of financing war orders and had not yet started to get big returns. Furthermore the company's large item of inventories and receivables shows that it was supplying large amounts of materials not yet paid for and was also investing large sums in purchasing raw materials, etc., which accounts for the low cash position at the time. The total assets were $80,670,485. In liabilities, besides the capital stock at $60,000,000 and $8,024,436 surplus, are the items $7,756,700

At the date of this writing, the German-American situation was tense. However that may turn out, the position of the American Woolen Company should be secure. In the event of a peaceful solution of difficulties with Germany, its present large orders, which are enough to keep its woolen machinery working at capacity for a long time to come, insure large earnings. In the event of actual war with Germany, the United States would immediately have to equip a large number of soldiers, which would mean large additional orders for this company for uniform and overcoat materials, also for blankets, etc.

The market movements of American

Woolen Company common stock over a period of five and one-half years tell the story of its dividend possibilities. The figures for it and the preferred on the New York Stock Exchange follows:

The high prices for the current year on both the common and preferred were made since August 15. The highest price at which the stock ever sold was 118½ for the preferred and 48 for the common in 1905 and 1906, respectively. The lowest were 65 for the preferred and 7½ for the common, both in 1903. The recent advance of the common stock to the high price of 38½ was accompanied by reports that dividends were not far away. For the first time since 1910, the stock has sold at a price where it can be classed among the dividend possibilities because of its price. The market range of 1913 and 1914 speak plainly of the remoteness of disbursements from the outlook of that time.

The company's business is now worldwide. It has always been the most prominent in domestic trade, a position from which it is not likely to be shaken. After the war, there is strong possibilities that this country will take the place of Germany to a large extent and France and Great Britain to a smaller extent in supplying other countries with woolen goods. It will be years before the three European countries mentioned will be able to restore normal commercial conditions, supply the long-waiting wants of the civil populations for woolen goods, finance exports, reorganize selling establishments, etc., so as to threaten this country with further danger under the present tariff. By the time that Europe is in a position to send woolens here again, it is probable that a higher schedule will be in force. If a Republican administration is elected in 1916, it is practically certain that a higher tariff will be enacted into law. As for the Democratic Party, it is believed that it has seen some of the evils of too-low tariff, and will remedy such before long; also that it will avert any further calamity in American industries if such a condition should threaten in the future.

Hints for Investors:

THE present situation in the so-called war order companies is putting their bonds in a different position. The status of quite a few will have to be changed from "speculative" to "investment" as a result of the big earnings which will strengthen working capital and create a bigger equity back of the bonds. It will be well to study this class of bonds.

* * *

THE normal level of many industrial bonds will be lifted somewhat by the unusual prosperity many of these companies are enjoying. Until some of the older middle grade issues have gone through this process of seasoning it will be difficult to tell at just what level they should be bought or sold.

* * *

MOST of the convertible mining bonds are now absurdly high as an investment. Before you rush to buy be reasonably sure there are great possibilities in the conversion privilege.

* * *

THE railroads in the South offer some of the best opportunities to make a speculative profit in bonds along with reasonable safety. It is an axiom of investment to buy when things are cheapest and neglected. That condition exists in the bonds of the Southern roads. Seaboard Air Line Adjustment 5s are a case in point.

* * *

RECENT experience with underlying bonds shows that they must represent a live and profitable piece of the property if they would get their stated dues and position in case of trouble. Make sure of this when buying this class of investment, especially if it is the obligation of a middle grade railroad property.

Opportunities in Preferred Stocks

Have They Discounted Prosperity?

By FREDERICK LOWNHAUPT

THE LURE of the market today is of course the common stock. "The last shall be first" was never more true than in this present stock market when the common stocks have not only the front of the stage but the whole platform. This is the result of anticipating the big profits that are expected to accrue to the various manfacturing companies out of the untold millions (if all the stories are to be half believed) of war business now in their shops.

With such a rush as we have now with the market under full sway, so much money available for speculation, and such a ready public to buy not only the good common stocks but everything, good, bad and indifferent, it is no wonder some other things are neglected. Bonds are almost outcast. Preferred stocks are in numerous instances only put in among a list of stocks held as a "sweetener."

There is, of course, much money to be made in the common stocks because everybody wants them and is willing to pay just a little more than the last man—hence the "sky is the limit" acrobatics of the star performers. Preferred stocks with their cast-iron-bound 7% dividend rate get very little chance when talk of 50%, 100% or 200% disbursements electrify the air.

TABLE I

High Grade Preferred Stocks Which May Be Rated as Conservative Investments

	Dividend Rate.	Accumulated Back Divs.	Approximate Present Price.	Previous High Price.
American Beet Sug.	6	...	90	101
American Car & Fdy.	7	...	118	124
Amer. Smelt. & Ref.	7	...	106	137
Amer. Woolen	7	...	91	107
Am. Sugar Ref.	7	...	118	141
Amer. Ag. Chemical	6	...	93	104
American Tobacco	6	...	107	109
American Locomotive	7	...	98	122
Baldwin Locomotive	7	...	105	110
Amer. Cotton Oil	6	...	99	107
Bethlehem Steel	7	...	150	160
Central Leather	7	...	106	111
Nat'l Biscuit	7	...	122	130
Amer. Coal Products	7	...	118	122
Goodrich, B. F.	7	...	108	109
Col. Fuel & Iron	8	52	155	155
Woolworth, F. W.	7	...	124	121
Gen. Chemical	6	...	113	115
Lorillard & Co.	7	...	115	...
Railway Steel Spg.	7	...	93	111
Sears-Roebuck	7	...	124	130
Studebaker	7	...	104	125
Sloss-Sheffield	7	...	95	130
Kresge	7	...	111	102
Virginia Caro Chem.	8	...	101	134
Underwood & Co.	7	...	104	114
Willys-Overland	7	...	106	130
American Can	7	8¾	106	129
Gen'l Motors	7	...	110	107
United States Steel	7	...	113	125

It is well, therefore, to look into the situation with respect to the preferred stocks on the list. It would be difficult to go into the record of the great mass of preferred shares that were issued during the great wave of preferred stock buying in 1910, 1911 and 1912. Many of them have gone into investment strong boxes and many are traded in only over the counter without any public record. Also there were many small issues.

In the accompanying tables are shown almost all of what are generally known as the "old" preferred stocks, that is, those stocks which were practically the outgrowth of the era of corporate consolidation and refinancing prior to 1903. These are the stocks like the United States Steel, Corn Products Refining, General Chemical and National Lead among the better ones, and International Paper, American Hide & Leather and U. S. Cast Iron Pipe & Foundry among the poorer issues.

The investor should understand the distinction between these so-called "old" and "new" or "modern" preferred stocks. The older stocks, in many instances, represented the value of the properties in a consolidation, while the common represented "water." The years have changed this in many cases, notably United Statec Steel, which is universally acknowledged to be worth $65 at least, and possibly $75 or $80. On the other hand the newer or modern issues are built in an elaborate way and carefully guarded to prevent the corporation from floating bonds wholesale, or from issuing notes or breaking up the property by common stockholders.

There is no definite relationship between the newer issues and the property assets, although in many instances there is a big equity left over to represent the value of the stocks. The newer issues have been based upon earning power and many of them have made good, although quite a few after only three or four years of life can hardly be considered seasoned investments.

With the windfall of earnings that is coming to such companies as Studebaker, Willys-Overland and General Motors, as a result of the tremendous war business, their preferred stocks will be practically seasoned investments in another year, while the preferred issues of some of the older companies will be eminently more respectable than they have been for years.

The big earnings of the present and future months will create a big equity back of many stocks that should retain 10 or more points in their price perma-

TABLE II

Semi-Investment Preferred Stocks

A Group of Issues Which Have Somewhat More Speculative Possibilities Than Those of Table No. 1

	Dividend Rate.	Accumulated Back Divs.	Approximate Present Price.	Previous High Price.
American Agr. Chem.	6	...	93	104
Corn Products Refining	5	17½	83	93
Maxwell Motors 1st	7	8	90	...
Pittsburgh Coal	5	43	97	100
Pressed Steel Car	7	...	101	112
U. S. Rubber 1st	8	...	105	123
Republic Iron & Steel	7	12¼	102	111
Crucible Steel	7	23	102	106
Cuban-Amer. Sugar	7	5¼	112	105
Loose Wiles 1st	7	...	95	105
Loose Wiles 2nd	7	...	60	95
Maxwell Motors 2nd	6	...	40	44
Mays Dept. Stores	7	...	98	...
Mexican Petroleum	8	...	84	104
Nat'l Cloak & Suit	7	...	110	...
Nat'l Enam & Stmpg	7	...	90	100
Nat'l Lead	7	...	112	115
Pettibone Milliken 1st	7	...	92	...
Standard Milling	5	...	73	73

nently and give a fourfold assurance that their dividends are safe for some time to come. A study into this situation will repay the careful investor.

For the purpose of our study we divide the principal preferred stocks into three groups as shown in the accompanying tables. In Table I is a list of the better class issues, which fluctuate comparatively little, and have been regular in payment of their dividends.

If you would apply a test to an industrial preferred issue to know whether it is a good stock or not, find the answer to these questions about the company and its preferred stock:

Any preferred stock or corporation that can meet these high tests is surely not far above present level, which means that no great amount of money is to be made in these issues unless abnormal times lift prices far above their old level. These high prices in many cases were made in the great bull market of 1909, so that if we assume conditions are quite as good or better today for a prolonged rise, these prices should be passed in the coming months.

Certainly there is a wide margin in other cases like American Smelting & Refining, American Locomotive, Studebaker and Sloss-Sheffield and American Can, to warrant the belief that considerable enhancement is yet to take place before this movement in the markets has culminated. American Can, especially,

Seven Tests of a Preferred Stock

I. How many years has the corporation been in successful operation?

II. Has it made a practice of publishing detailed reports of earnings and financial conditions?

III. Has the company ever failed to pay its full preferred dividend each year from the first or second full year of operation?

IV. Has the company, with few exceptions, earned its full preferred dividend each year or exceeded them over many years?

V. Has it met the cost of extensive improvements? Has it made them in large part out of earnings, and has it resorted only to a small extent, or not at all, to bond issues and stock increases?

VI. Is it following a conservative course as to dividends on common stocks?

VII. Is the company facing any changing business or economic conditions, business depression, financial trouble, serious litigation or anything calculated to have an adverse effect on earnings or the market position of its stocks, except as the stocks may be affected by the general movements of the stock market?

a good investment. It must be stated however, that these are very severe tests and necessarily exclude some rather good stocks.

Below is a partial list from which the investor can select, if he has not the facilities or training to study into these various tests as outlined:

American Agricultural Chemical.
American Car & Foundry.
American Cotton Oil.
American Locomotive.
American Smelting & Refining.
American Woolen.
National Biscuit.
Railway Steel Spring.
Sloss-Sheffield Steel & Iron.
United States Steel.
Virginia-Carolina Chemical.

It will be noticed that the previous high price of the stock in many cases is has some attractiveness, in that 8¾% is accumulated on the stock which is likely to be paid off at any time.

In the second group, shown in Table II, there is hardly more opportunity for enhancement in price than in some of the better grade issues of the first group. There ought to be a wider distance between present prices and the high to maintain the relative position of the securities. It is true there are some excellent opportunities such as Mexican Petroleum, Loose-Wiles 2nd, and U. S. Rubber 1st, but the difference in character of stocks is not enough.

Possibly the best individual issue for speculation in this group is Pittsburg Coal, which has accumulated 43% of back dividends. There are some large

equities back of this stock that are apparently hidden, which may some day cause the larger part of this accumulated dividend to be paid off, which ought to lift the stock thirty to fifty points.

Those in Table II are essentially companies that will not test up to the severe questions laid down for the conservative investor. On the average he has to pay less for his stock as the only compensation that he gets in many cases for the chance to make no more than he could make on a similar rise in the better grade stocks. Of course he has among this group several with large amounts of accumulated dividends, which in a period of extra good times might be paid off in full or in large part, but in those companies where this situation exists there is little incentive to expect this good fortune, with the exception of the coal company mentioned.

In the group shown in Table III we have the possibilities of a tremendous profit but a bad record on the debit side of the balance sheet. Just now some of these stocks are quite popular speculatively, but it would be entirely too much to hope that any, with the exception of Hide & Leather, will reach their former high prices for some time to come. By some chance of fortune one or two may have large advances, but as implied by their grouping, they are speculation pure and simple, with little hope of a dividend for a long time, if ever, and only an upward swing to make price changes.

TABLE III

Group of Speculative Preferred Stocks

	Dividend Rate.	Accumulated Unpaid Divs.	Approximate Present Price.	Previous High Price.
Internat'l Ag. Corp	7	...	40	...
Am. Hide & Leather	7	106	36	55
Amer. Linseed	7	...	35	66
Amer. Malt Corp	6	26	26	69
Cal. Petroleum	7	1½	39	95
Federal Min'n & Smelt	7	5½	50	97
Internat'l Paper	6	29	38	97
Union Bag & Paper	7	36¼	28	89
U. S. Cast Iron P. & Fy	7	...	46	97

Investment Digest

Allis Chalmers.—HAS CONTRACT with Bethlehem Steel for machining shells. Earnings for June quarter were nearly $200,000, or at rate of less than 5% per annum on preferred.

Amer. Agr. Chemical.—(Correction.) YEAR ENDED June 30 last expected to show slightly better than 7.68% earned on common previous year.

American Beet Sugar.—THIS YEAR'S production estimated at 1,750,000 bags, an increase of 3% over last year. Expects to sell sugar fully 1c. higher than year ago and to earn from 18% to 20% on common. Rumored that duty of ¾ to 1c. per pound may be retained on sugar.

American Can.—SAID to be negotiating $40,000,000 war order for shells, which would make a total of $80,000,000 war orders on hand.

American Car & Foundry.—HAS CLOSED war orders totaling $10,000,000, and is negotiating a contract which will run close to $45,000,000.

American Coal Products.—REPORTED to have large contracts with leading powder companies. Expected to pay stock dividend at end of the year from earnings which are now running at rate of 25% on the common.

American Hide & Leather.—EARNINGS for quarter ended September 30 show increase over the previous quarter, and estimated to be running at rate of 12% per annum on the $13,000,000 preferred. Company reduced its bonded debt by $352,000 during year ended with June.

American Locomotive.—WILL REPORT a deficit estimated at $3,000,000, after charges and dividends, for year ended June 30 last. Has a $65,000,000 order for shrapnel

and an $8,000,000 locomotive order. This year's prospects are the brightest ever. The company has reduced note indebtedness from $5,474,000 to $3,200,000, and expects profits from war orders to wipe out the debt.

American Light & Traction.—SHOWS a steady gain in earnings from electric power supply, indicating an upward tendency in industrial situation. Earnings for first half of 1915 increased $300,000 over same period a year ago, and July earnings applicable to dividends were 27% over those for July, 1914.

American Malt Corporation.—POOR EARNINGS for last two years laid to general business depression. Is having a poorer year than 1914. Expects to earn 3% dividend on second preferred. Has cash balance of $600,000.

American Pneumatic Service.—DECLARED SEMI-ANNUAL DIVIDEND of 3½% on first preferred, and semi-annual dividend of 1½% on second preferred.

American Smelting & Refining.—PLANTS OPERATING at capacity. Earnings in first half-year were at rate of 10% on the common. Company is spending $750,000 to increase capacity of Tacoma plant from 2,000 to 5,000 tons per month.

American Smelters Securities.—NET INCOME for 1914 year $5,519,000 against $6,151,000, and $7,479,000 in two preceding years.

American Steel Foundries.—FRANKLIN PLANT will resume operation September 1. Vice-President Ripley says rumors of $100,000,000 war order are wild exaggerations, and that total does not reach $20,000,000.

American Sugar Refining.—IS EARNING 7% common dividend with ample margin. Raw and refined sugars are lower, which will mean smaller net profits for second half-year.

American Woolen.—IS TO BECOME a Massachusetts corporation, and will give up New Jersey charter. Shareholders will be asked to deposit their stock.

Atlas Powder.—DECLARED EXTRA dividend of 1½%, in addition to regular quarterly common stock dividend.

Baldwin Locomotive.—PROFITS on war orders totaling $100,000,000 are estimated at $12,000,000, equal to about 20% on the stock.

Bethlehem Steel.—LARGER PROFITS will eventually be distributed in stock or cash, but no plan has yet been formulated.

British-American Tobacco.—DECLARED INTERIM DIVIDEND of 5% on ordinary shares for year ending September 30.

Canadian Car & Foundry.—MONTREAL believes New York interests have accumulated stock in anticipation of large earnings and prospective dividends. Company's president says corporation has booked more than $100,000,000 war orders for the Russian government.

Cuban-American Sugar Dividends.—DECLARED REGULAR quarterly dividend on preferred and 5¼% back dividends.

Central Leather.—IS BOOKING large orders for export and reports improved domestic business. Better than 6% on the common is looked for this year, and a 4% dividend rate is talked of. Declared regular quarterly preferred dividends.

Cramp Shipbuilding.—IS INCREASING number of employes to 4,000. Report that German government has purchased control ridiculed. Company taking no orders which will not show 15% profit.

Crucible Steel.—IS BUILDING a $2,000,000 ordnance plant at Harrison, N. J. Chairman Dupuy says no common dividends until $2,000,000 dividend scrip is retired, or accumulated dividends and scrip are funded.

Distillers' Securities.—1915 REPORT for year ended June 30 shows 4.64% on the stock. Interest on 5% bonds of 1927 earned nearly three times.

Driggs-Seabury Ordnance.—E. A. BORIE, formerly vice-president of Bethlehem Steel, is slated for presidency of newly organized company. Common stock to be listed on curb. Preferred stock not to be offered to public.

Du Pont Powder.—DIRECTORS approved new financial plan involving 200% common stock dividend. New company to absorb old will be a Delaware corporation. Reported, but not confirmed, that company has received largest single order in its history for 65,000,000 pounds at $1 per pound.

Electric Boat.—STOCKHOLDERS have been offered 10 shares of new Submarine Boat Corporation for each share of the common and preferred of the Electric Boat Co. Submarine program of United States government to call for expenditure of $80,000,000 for additional submersibles.

Fore River Shipbuilding.—PLANNING to retire $750,000 bonds. During last two years company is said to have earned $1,500,000.

Guggenheim Exploration.—PLANS to distribute its holdings of Ray Consolidated and Chino Copper Co. shares, in addition to some cash to stockholders.

B. F. Goodrich.—CONTINUATION of present earnings will mean $12.50 per share on common stock this year.

General Motors.—EXPECTS TO SHOW dividends between 40% and 45% for current fiscal year. Question of distribution of undivided assets among stockholders likely to come to a head before September 15.

General Electric.—UNDERSTOOD to be earning better than 11% shown on stock last year. Has booked new $12,000,000 war order.

Hall Switch & Signal.—HAS $4,000,000 war order for shells.

International Harvester. — REPORTED to have a large contract from British government for "Dreadnought" steam plows.

International Agricultural Corporation.—EXPECTED to show earnings for year ended June 30 sufficient to meet interest charges.

International Mercantile Marine.—PROFITS for six months ended June 30, after depreciation charges of $2,750,000, were in excess of $11,000,000. Minority stockholders oppose plan of reorganization.

International Steam Pump. — STOCKHOLDERS planning protest against assessment of $12.50 on common and preferred stocks.

Kelly-Springfield Tire.—IS NOW 27,000 tires behind order. Directors estimate $1,500,000 net earnings in 1915. Substantial extra cash dividends expected this fall.

Lackawanna Steel.—EARNINGS for the year will be at least $10,000,000. Company has made large sales of benzol, and received important contracts for rail and shrapnel from foreign governments.

Maxwell Motor.—PLANTS working at capacity. Plans for liquidating accumulated preferred dividends are being considered.

National Enameling & Stamping.—WAR ORDERS are said to exceed $20,000,000.

New York Air Brake.—ESTIMATES on war order profits run as high as $150 per share. Company is negotiating $20,000,000 war order for high explosive shells.

Pullman Company.—DICKERING to sell Russia 10,000 freight cars. Works are operating 50% capacity.

Pressed Steel Car.—EARNINGS on present orders may mean profit close to $5,000,000 for common stock within next 18 months. Is turning out 1,000 shells per day on Russian $15,000,000 war order.

Republic Iron & Steel.—RESUMED regular quarterly preferred dividends of 1¾%. and declared ¼ of 1% on back preferred dividends, leaving 12% unpaid. Steel works operating at capacity. Outstanding notes have been refunded by sale of 5% bonds. Company earning twice dividend requirements.

M. Rumely.—ORGANIZATION COMMITTEE hopes to raise $1,800,000 in cash by assessing common stock $9 per share, and preferred $17 per share. Rumored common stock will be scaled to 15%.

Sloss Sheffield.—EXPECTED DIRECTORS will resume regular preferred dividends at September meeting.

Sears Roebuck.—SEVEN MONTHS ended July shows sales of $60,133,000, an increase of nearly $6,000,000.

Studebaker Corporation.—TRADE CIRCLES estimate net earnings for first half-year at nearly $6,000,000, which would leave $5,400,000, or 20% on the common.

Standard Steel Car.—HAS BOOKED 75,000 shell order for Allies.

United States Industrial Alcohol.—SPENDING $1,000,000 for new plant at Baltimore. Contract with Hercules Powder Co. to run from 2½ to 4 years, and to show $6,000,000 profits, or 50% on common stock. Next year's earnings estimated to run close to 30%.

United Paper Board.—REPORTED to have secured control of a process which will reduce costs substantially. Talk of dividend on preferred.

United Shoe Machinery.—DOMESTIC BUSINESS smallest in years, but foreign plants are working night and day on army contracts. Company flatly refuses to take war orders for American plants.

United States Steel.—MILLS OPERATING between 90% and 95% of capacity. July net earnings estimated at $13,000,000. Company's three benzol plants, with yearly capacity of 900,000 gallons, expected to be operating September 15.

United States Smelting.—JUNE AND JULY EARNINGS largest in company's history. Reports an important ore "strike" in Mexico.

Virginia Iron, Coal & Coke.—HAS RECEIVED large foreign orders for benzol.

Willys-Overland.—SHIPPED over 50,000 cars so far this year. Capacity to be increased to 1,000 cars daily. Profits at rate of 50% per annum on common during last two months.

Westinghouse Air Brake.—OPERATING on a seven-days-a-week schedule.

Winchester Repeating Arms.—STOCK SOLD at $3,000 per share, representing advance of $1,200 per share. Greatest gain ever made by any stock in a day. Financial gossip speaks of 1,000% stock or cash melon.

Westinghouse Electric. — OBTAINED CONTROL of Stevens Arms Company, with capacity of 1,000 rifles per day. Company's orders for shells estimated to mean a profit of $500,000 per month.

RAILROADS

Atchison.—Pres. Ripley says the fall prospects for a good tonnage are excellent, but it is not likely to equal last year, when

Atchison did its largest gross business. Estimated gross revenues for July show gain of about $250,000 over last July, but August is expected to show some falling off.

Atlantic Coast Line.—Has ordered 75 freight cars and 10 locomotives, costing more than $1,000,000.

Boston & Maine.—Bankers will ask holders of road's $17,000,000 notes, due Sept. 2, to again extend them, this time for six months. In fiscal year ended June 30 last the road came within $334,000 of meeting its fixed charges as against a deficit of $2,044,742 for the previous year. Officers believed that if consolidation with leased lines can be effected a financially strong corporation will result.

Buffalo, Rochester & Pittsburg.—Year ended June 30 shows net operating revenue of $2,544,683, operating income of $2,314,087 and a total income of $3,032,733. Surplus before dividends, totaled $780,000 as compared with $990,000 for the previous year.

Canadian Pacific Railway.—Preliminary report for year ended June 30, shows gross of $98,865,210, compared with $129,814,824 for last year, net of $33,574,628 against $42,425,928. Surplus after dividends, $89,915 against $9,698,245 for the year previous. Unsatisfactory showing was due to the war. July of this fiscal year was worse than July, 1914, and not until September is there prospect of improvement.

Chesapeake & Ohio.—In 12 months ended June 30, Chesapeake & Ohio hauled 21,124,821 tons of coal, an increase of 2,262,185 tons over the previous year. Total coke tonnage was 200,921 tons, a decrease of 187,831 tons.

Central R. R. of New Jersey.—Jersey Central will lose about $1,500,000 in gross and net through the new anthracite freight rates. Company expects to get higher water transportation rates on coal shipments to New England, thus in a measure offsetting decrease arising from lower land rates.

Chicago & Alton.—Showed deficit of about $1,690,000 for year ended June 30. This is the fourth successive yearly deficit and the total for the four years is $6,640,000. Interests connected with the company say there is no danger of a receivership.

Cleveland, Chic., Cin. & St. Louis.—Big Four's six months' gross earnings to June 30, increased $458,000, while operating expenses were reduced nearly $2,000,000, so that net showed a gain of $2,366,905. In the twelve months to June 30, gross earnings declined $581,000, while operating income increased $4,572,499.

Erie.—Interstate Commerce Commission has approved Erie's anthracite rate to Chicago. Will give Erie $500,000 additional revenue.

Great Northern.—Estimates of grain to be harvested along great Northern's lines places the total at 160,000,000 bushels, compared with 100,000,000 bushels last year.

Kansas City Southern.—Expects to benefit from big winter wheat crop and improvement in traffic conditions.

Lackawanna.—Reduction in Lackawanna's anthracite rates effective Oct. 1, will reduce road's gross slightly less than $1,000,000.

Lehigh Valley.—Will lose in gross and net revenue about $1,200,000 by reason of anthracite rate reduction.

Missouri, Kansas & Texas.—Committee of directors is working on plan of readjustment. Gross from July 1, to August 14 was $235,000 less than last year.

Missouri Pacific.—B. F. Bush appointed sole receiver for road. Committees appointed by the plan of readjustment consider reduction of fixed charges contemplated by plan, essential.

Northern Pacific.—Territory tributary to Northern Pacific may harvest 150% of the grain crop of last year. Management expects satisfactory earnings this fall.

Pacific Mail.—Believed to have received not less than $7,000,000 for its five largest steamships. Owns seven other steamships which, when sold, should bring the total to $9,000,000. On dissolution it is estimated that stockholders will receive from $40 to $45 a share.

Reading.—What Philadelphia & Reading loses by the anthracite rate reduction, Philadelphia & Reading Coal & Iron Co. will gain. Reading Co. owns stock of both railway and coal company.

Rock Island.—Assessment of $40 a share being talked about. Believed that the courts will not allow default of interest on junior $20,000,000 bonds. Tide of rising prosperity may put company back on feet in not far distant future.

Seaboard Airline.—New financial plan provides for retirement of preferred and common stock in exchange for stock of new company. New preferred will be entitled to 6% dividends. Holders of old preferred will receive less of new preferred, while common will be exchanged share for share.

Soo Line.—President Pennington estimates road will handle 62,500,000 bushels of grain this year. Previous largest year was 1913, when it handled 56,681,000 bushels. Early grain is already moving.

Southern Pacific.—Passenger revenues in July gained $1,000,000 approximaetly from Panama Exposition traffic. Increase of $1,330,000 in gross substantially reflected in the net.

Investment Inquiries

NOTE.—Answers as published in this magazine are selected and condensed from the very large number of inquiries received from our readers. All such letters are answered by mail in advance of publication, hence stamped and self-addressed envelopes should accompany them. Subscribers' inquiries are given the preference in order of answering.

Rumely

E. D.—In the event of Rumely getting some real war order business in which there are very good profits, there would doubtless be a flurry in the stock—the people who knew most about the business making the movement in the stock. Of course, it would be given publicity to help along in lifting the stock.

As an investment, Rumley stocks are undesirable. We would advise you to be quite sure of your ground before rushing into Rumely stock on the war order talk.

Electric Boat

E. B.—Electric Boat (new) is the stock of the corporation which was created to take over the work and properties of Electric Boat (old). Ten shares of the new stock were given for one of the old. It may fairly be assured that the new capitalization pretty well represents business and prospects so that you need expect nothing like what happened in the old stock if you buy the new securities. The stock of the new will be a speculative proposition and will likely pay moderate dividends.

American Coal Products

W. F.—We believe the reported figure of 45% on earnings on American Coal Products Co. is reliable. We know the company to be doing exceptionally well and it is expecting to branch out in its chemical business even wider than before the war. Our chemical concerns have seen a light as to how they may make things they neglected in the past and are in many instances expecting to keep on manufacturing these products after the war closes. As an investment we think the stock attractive.

Seaboard

F. S.—We advise you to hold Seaboard Air Line preferred for much better prices. The company is in a strong position and this will tell in the long run. If we get a big market in railroad shares this stock will be among the leaders in the cheaper issues, especially after the war is over.

Gt. Northern Ore

E. S.—Great Northern Ore certificates represent the ore properties along the Great Northern Railway which formerly belonged to the company, but are more or less separate now for legal reasons. There is likely to be mined an increased amount of ore due to the improvement in the steel business.

American Locomotive

J. T.—American Locomotive common is a good speculative purchase. The company has a fair amount of equipment business, a large amount of war orders and considerable equipment building capacity still available for the car and locomotive buying that is expected of the railroads later in the year. When this equipment buying sets in it should put the stock of the Locomotive Co. on a much better footing.

Lackawanna Steel

D. E.—Lackawanna Steel has its plants at Buffalo, N. Y., and does mostly a business in rails, although it manufactures a few other steel products.

The company has received some large business in rails, and is working its plant at practically capacity on other steel products as a result of war business. There is a rumor in the air of large earnings. It is estimated in some quarters that the company will earn 5 per cent. for the common stock this year. The prospects for the company are good, and it is apparently enjoying the full share of the boom in the steel business.

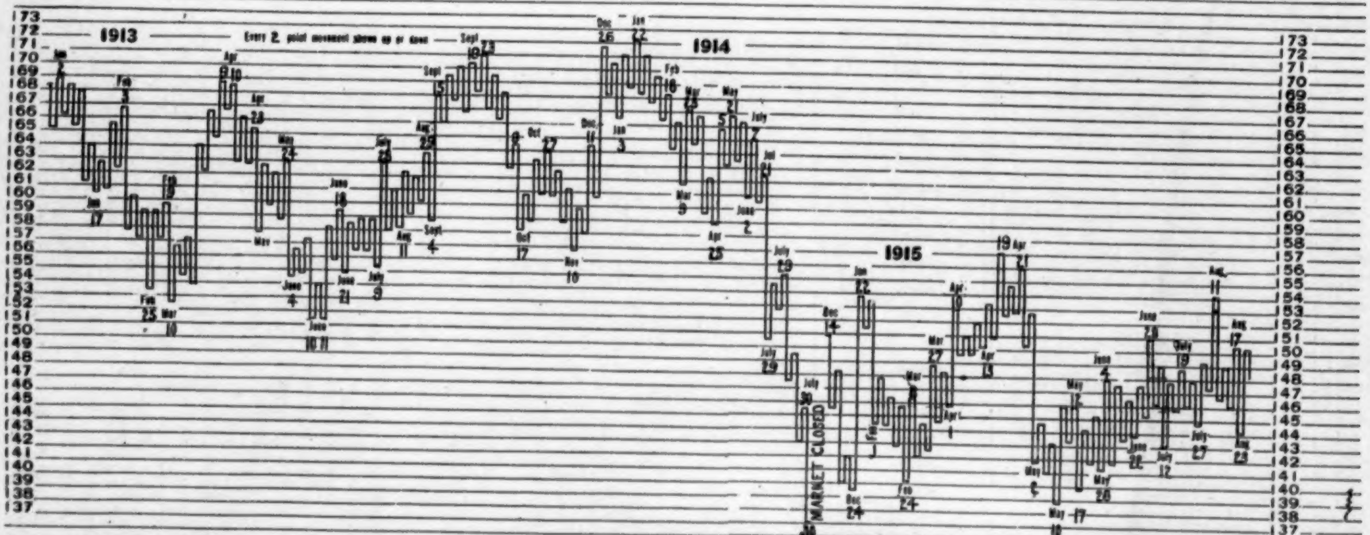
Distillers

M. B.—Distillers Securities is considerable of a speculation. The company is enjoying a good war business in alcohol, so that dividends are hoped for in September. The sale of the Industrial Alcohol stock gave them considerable money in the treasury and the big business in alcohol helped more. For the time being the company is really doing well. When the war is over things may change considerably for this stock.

Steel Foundries

J. S.—The outlook for American Steel Foundries seems rosy at the moment, if reports of war business are only approximately true. It is reported that they are about to close contracts for $60,000,000 war business and that the company is running 60% on usual business. Of course we cannot say what amount of business is actually on hand, but at least it is reasonable to suppose that it is liberal.

READING.



Note.—It is planned to run in each issue a chart similar to the above on leading stocks. In the last issue appeared a chart showing Colorado Fuel & Iron and Chicago, Milwaukee & St. Paul movements from 1913 to date, and in the August 7 issue a chart showing movements of Reading and Republic Steel's and in the July 21st issue U. S. Steel common for the same period.

MINING AND OIL DEPT.

The Smelter at Cananea.

Greene-Cananea

Status of Operations at Property—Position and Prospect of Stock

By C. S. BURTON

THE vigorous demand for copper metal has not been universally an unmixed joy for the producers. To own, as does the Greene Cananea, one of the most up-to-date and complete of plants for the reduction of copper ores, capable of producing from 75,000,000 to 100,000,000 pounds of copper per annum; to see a market demanding metal at the prices ruling during the past eight months and then to be unable to speed the plant to its utmost on account of the Villistas and the Carranzistas, is, to put it very mildly, a situation that calls for the exercise of much patience.

The Greene Cananea properties extend over six hundred square miles of territory; an area equivalent to one-half of the State of Rhode Island, or one-fourth of the State of Delaware, lying just across the Mexican line south of Bisbee, Arizona. The distance from the Copper Queen and the Calumet & Arizona to the mines of the Greene Cananea is about 68 miles, but this distance takes one from the States across the border into Mexico. Happily, even though Cananea lies forty miles south of the Arizona line, as will be seen from the accompanying map, it has not been a storm center and while it was impossible to operate the mines steadily during the past few months, they have not suffered any material damage, the pumping plants have been kept in working order, a force of Mexican mechanics have been kept at work overhauling and looking after machinery, while some development work has been done, on the whole, therefore, the mines and plant are in excellent condition, with a greater quantity of ore in sight and ready for extraction than for a number of years.

There is a marked contrast between properties such as those of the Greene Cananea and the large low grade, milling coppers, a number of which have been described in this series of articles. Instead of one or two large ore bodies, capable of being outlined by diamond drills and the tonnage estimated with accuracy, the Greene-Cananea has some nine or more producing mines, scattered along a mineral belt some six miles long by two miles wide.

The quantity of mineral is very great, but when it is considered that no two of the properties have just the same characteristics; that a large part of the ore from some of the mines can go direct to the smelters; that from other mines the entire product must be concentrated; that at least one mine yields ore

that must all be sorted by hand, it will be understood that it is impossible to estimate ore reserves in tons or millions of tons as can be done in the so-called porphyry mines. The mines are all opened for several years ahead and development is kept ahead of extraction far enough to assure constant ore reserves.

As in the Copper Queen, the great Phelps Dodge property, and the Calumet & Arizona, controlled very largely by the same interests that control the Greene Cananea, the formation precludes an estimate of the ultimate possibilities, and at the same time gives most positive assurance of values and permanence. In this regard Greene Cananea must take rank among the greater copper producers and it must suffice to say that a production of seventy-five million pounds of copper per annum could be maintained for years to come without any probability of exhausting the ore reserves.

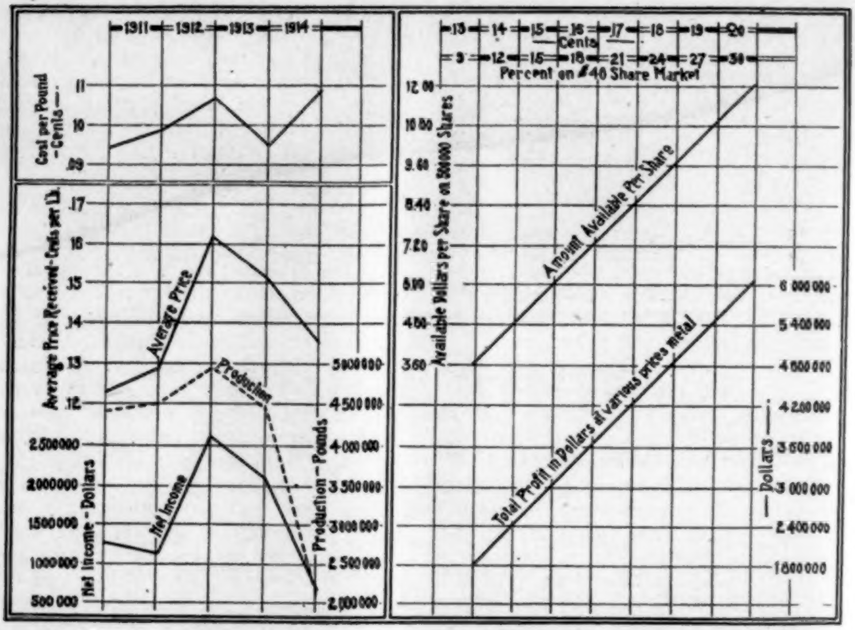
The older or first organization—the Greene Consolidated Copper Company,—"bogged down," to use a western phrase, in 1906. The mill which had been erected under Colonel Greene's management had become worn out and Dr. L. D. Ricketts was employed to superintend the erection of a new plant. The result was and is one of the best and most efficient plants in the copper producing industry. As might be expected everything in and about Cananea is in one way or another part and parcel of the operations of the Greene Cananea. Water, light, power and telephone service are all supplied by the company.

It was after the erection of the present plant that Colonel William C. Greene, the picturesque optimist, in a way almost the last of his type, found his plans in other directions going amiss, found also that he built wheels within wheels in the Greene Consolidated Copper Company until the snarl was quite past untangling. The Colonel tried to put a very large part of Northern Mexico into the Greene Gold Silver Company, without the use of much cash and presently his house of cards fell to pieces and it became necessary for some real management to take charge of the mines and plant at Cananea, as well as the finances of the company. The Cole-Ryan interests were not at that time so fully identified with the Anaconda people as they have become since, although they had, however, long been interested in the Bisbee district and controlled the Cananea Central, which was, in 1906, merged with the Greene Consolidated to form the present Greene Cananea Copper Company. There was an immediate change in the administration of the properties and efficiency and economy took the place of the breezy, haphazard slap dash methods of Colonel Greene.

At the present time it is costing about ten cents to make a pound of copper at the Greene Cananea and under the circumstances the management considers this figure quite satisfactory. Normally the mines should employ about thirty-five hundred men, there are about thirteen hundred on the payroll now and additions can only be made slowly. The old force that lived in Cananea "before the war" is scattered, many doubtless have been killed, the mine management is having to build up a new mine crew or many new mine crews out of raw material, and that by no means of the best. After two or three years of guerrilla, border warfare, men do not readily settle down to humdrum work, the Mexican peons especially, and additions can only be made slowly as mine bosses can handle new men. Even under these conditions there is a production of three million pounds per month, which as conditions will permit will be increased and costs materially reduced.

One item which is expected to add to

Showing Location of Cananea, Just Across Border Line



Graphic showing costs per pound, selling price received and estimated profits on various prices of copper, as well as percentage on present price of stock.

the profits now being won is the introduction of flotation for the ores which must be concentrated. It is not expected that flotation will cut down copper costs per pound. There is an added cost for grinding and regrinding of the ores to the fineness necessary for flotation, the profit comes in the recovery of a larger percentage of copper from the same ore tonnage. In other words it may still cost ten cents a pound to produce the copper, but the same extraction from the mine may be made to yield ten or fifteen million pounds of copper to the year's output.

There are some of the largest figures in the copper world connected with Greene Cananea; its organization is now one of the units of the Anaconda-Inspiration group and its officialdom includes Mr. John D. Ryan, Mr. William E. Corey, Mr. James McLean of the Phelps-Dodge Company. Dr. Ricketts, the consulting engineer is one of the principal figures in the mining industry in Arizona and Mexico. Dr. Ricketts has built several of the most successful plants in that district; the plant at Greene Cananea, the new mill at the Arizona Copper Company, and others. As a metal-

Comparative Statistics

Year	Production (pds.)	Cost (cts. per pd.)	Selling price (cts. per pd.)	Net income
1914	21,858,920	10.72	13.83	$638,955
1913	44,480,514	9.63	15.10	2,186,260
1912	48,157,847	10.31	16.02	2,580,750
1911	44,897,466	9.84	12.88	1,318,473

lurgist, Dr. Ricketts has done some splendid work, one of his present interesting problems is the adoption of a leaching process for the ores of the New Cornelia, a low grade milling deposit, now being developed by the Calumet & Arizona people.

The financial organization of the Greene Cananea is somewhat involved, the complications being something of an unavoidable inheritance from the days of Colonel Greene, but as the Greene Cananea Company is the only organization in which the public owns any stock the indirect manner of holding title to the physical property becomes merely a bookkeeping and auditing detail.

Greene Cananea has an outstanding capital of 473,343 shares of a par value of $100.

On the present share market price of $40, the properties are selling on a basis of $19,000,000, in round numbers. Figuring a profit of eight cents per pound on present production of 36,000,000 pounds per annum, this would be $2,880,000, which would be equivalent to 15 per cent. upon the present market price of the stock.

There are strong indications that the United States has about reached the end of its period of watchful waiting and that Mexican conditions will be bettered in the near future. It is this factor that controls the share market in Greene Cananea. On a normal output of 75,000,000 pounds, which could be easily attained with better labor conditions, costs could be reduced and profits would run up. But, taking 17 cents copper, which is very conservative according to the best authorities in the metal market, and allowing nothing for lower costs, earnings would equal 27 per cent. on the present investment, which is surely attractive enough to justify a long pull and the taking of some chance on the betterment of conditions in Mexico.

The Concentrator at Cananea.

What He Said—and Did

At the Bottom

I. "I wouldn't buy anything in this market at any price."

10 Points Higher

II. "People who get in at this level deserve to have their money taken away from them."

25 Points Higher

III. "This is a great bull market. Get in—you can't lose money."

(He did—on the smallest possible basis of protection, with any old broker. Then they sank the Arabic.)

40 Points Higher

IV. "I once had a lot of money, but they did me out of it in the market."—*Odd Lot Review.*

The Boston Coppers

Future of the Metal Market—Position and Prospects of Stocks

By A. J. PHILLIPS

BOSTON for many years has been recognized as this country's premier copper stock market. There are upwards of half a hundred copper issues listed on this exchange and probably seventy-five per cent of the daily transactions are in mining issues alone. The zinc, coal, and gold issues of late have become the centre of considerable activity and trading in coppers has suffered proportionately. The majority of the active coppers, of course, are vein mines, but the porphyries have acquired a very prominent position in this market's activities since their appearance a few years ago. Omitting those issues whose principal market is in New York, we present in the accompanying table a list of the standard coppers with a comparison of present prices and high and low points for the past three years.

COMPARATIVE PRICES OF BOSTON COPPERS

Stock:	Present price (about)	1914		1913		1912	
		High	Low	High	Low	High	Low
Ahmeek	96	300	239¾	330	230	370	240
Algomah	2½	1¾	½	3¼	.20	8¼	2
Arizona-Commercial	7¼	6 5/16	2½	5⅝	2¼	6⅞	2
Calumet & Arizona	63¼	70⅛	53	72	56½	83½	57½
Copper Range	54	40¾	29	53	32	66½	48½
East Butte	12⅜	13	8	15	9¼	16⅞	12¼
Granby	82½	91	60	78	51	77¾	33
Greene-Cananea	39½	22	11	35	27⅝	11⅛	7⅜
Isle Royale	26⅛	24	16	33⅞	16	37¼	20¾
Lake	13⅝	10½	4¾	26½	4¾	49	20¾
Miami	25¾	24⅛	16¾	26	20¼	30⅜	23⅜
Mohawk	71	49½	39	65	38	73	50½
New Arcadian	11	7½	1⅞	2½	.50	6¼	2
North Butte	29½	19¾	30¾	24	21¾	39½	22¾
Osceola	79½	84	64	107	68	130½	100
Quincy	86	68	51⅞	80	52¼	95	72½
Shannon	7½	7½	4	13½	5	17⅞	9
Shattuck-Arizona	26	29¾	18	31	21	34½	....
South Lake	6⅝	5½	3	8½	2¾	11½	5⅛
Superior	25¼	32	22	40½	20⅛	48⅞	24
Tamarack	53¼	43	24½	38	21	20½	9½
Utah Apex	3¾	2⅝	1¼	2⅞	1⅛	3¼	1¾
Utah Consol	12½	14	8¾	11½	7⅛	51	26
Victoria	2½	2 11/16	1	2	.90	5⅞	1¾
Winona	3½	4⅞	1⅞	4½	.75	7¾	3⅛
Wolverine	59¾	47¾	30	76	39¼	117	65

The Metal Market

In view of the present weakness of metal prices the question of future prospects for the coppers is a matter of much interest to investors. Some of the marked advances which have occurred are plainly based upon speculative trading rather than upon present or prospective earning power. Nevertheless, it must be admitted that prevailing prices, almost without exception, are well below the high prices of former years. Viewed merely from a speculative point of view, therefore, the chances are very good for still greater appreciation. Such a statement may seem unwarranted considering that copper metal has declined nearly three cents per pound in as many weeks, but the fact remains that though consumers may be able to stay out of the market long enough to induce a break in price, they must shortly buy large amounts of the metal to provide for requirements which are known to be enormous. In this renewed buying lies the hope of the copper shares.

Each property which is in a position to produce any ore is bending every effort to raise the last pound of copper possible. The lapse of buying now obtaining means the accumulation of stocks, but not to such an extent that it will become a serious menace to the copper share market. The deferred buying soon will take care of the surplus now accumulating when once the check upon it is removed. So much for the metal market factors bearing upon the future of these shares.

Utah-Apex-Arizona-Commercial

Few of the low-priced copper stocks have responded to any marked degree to the favorable factors arising out of Europe's demand for the metal. Utah Apex and Arizona-Commercial are the only issues in the list given above of those whose prices are not quoted in two digits which are selling above the 1912 high points. Arizona-Commercial's gain over a year ago is approximately 128 per cent. and in view of the status of developments at the property the further appreciation of the value of the stock is likely to come very slowly—unless present operations should suddenly develop the ore body which is sought. The mine is carrying on active exploratory work stimulated by favorable discoveries at the Iron Cap property, but results come very slowly. The outlook for the Arizona-Commercial is promising but the investor must expect to wait some time for any material appreciation in the price of his shares, and an even longer time before those shares will yield any return in dividends. Utah Apex already has begun dividend payments, but before the property can rank much higher than at present it must solve many problems. The mine is handicapped in the nature of the ore bodies which it is developing, facing constantly the danger of caves wrecking the underground workings. This is due to the large proportion of lead in the ores making the bodies so much heavier than ordinary copper ore. The future for Utah Apex, however, depends upon the success of the new flotation process which is being installed at the property. The company is well provided with cash, and while developments underground are encouraging, the extent of the ore reserves is undetermined. All things considered, this company seems to be entering upon an era of profitable operatings which should be reflected in the not distant future in higher prices for the stock.

Copper Range

Copper Range appears to have reached the topmost point of appreciation which seems justified by present conditions. Production is at the highest figure in the company's history, a rate of 43,000,000 pounds of copper per annum, and its costs are the lowest on record. The significance of the current heavy output of copper may be appreciated when it is realized that Copper Range's ten-year average of production is only 29,000,000 pounds. Of course, the fortunes of this company are linked to those of its subsidiaries Trimountain, Baltic, and Champion. The output of these mines is increasing, costs are falling, and the ore treated is showing a higher percentage of copper content. As long as production continues at these high record figures, these low costs probably will be maintained, for they are not yet as low as the records achieved in recent previous years. Moreover, in the absence of an effort to produce every possible pound of copper, resulting in less discrimination in choosing the material treated, Copper Range's ore can be selected in a way to show a much higher yield than even the present figure. Again, the company's new plants may be expected to improve the splendid showing already made thus far this year. But Copper Range is not a dividend payer, and in view of the avowed purpose of the management to accumulate a large working capital it is unlikely that any disbursements will be made to shareholders for some time. The investor's source of profit, therefore, must be in an appreciation in the value of the stock and relative to the possibility of this taking place it should be noted that the stock now is selling pretty close to the high point of recent years.

East Butte

East Butte faces a high cost of production and the necessity of mining a great deal of second-grade ore. Also, its costs for reconstruction and development are high. These are factors militating against any pronounced improvement in earnings. Its present price represents approximately an adequate valuation of the property in the absence of unexpected favorable developments at the mine. Dividends are hardly to be expected for some time and a substantial appreciation in the market value of the stock seems precluded unless induced by more encouraging underground developments.

Greene-Cananea

Greene-Cananea has splendid prospects but is prevented from realizing them to a great extent by the disturbances in Mexico. This property has everything to gain from a speedy settlement of the trouble in that territory and little change in the market status of the stock can be anticipated until this is accomplished. The mine has the ore; it has also the plants to handle a far greater amount than it is producing. Its copper costs are fairly low, and it has no indebtedness to absorb its earnings. But notwithstanding these favorable factors, it is premature to anticipate dividends on this stock, even though they are predicted for the fall. The company has an abundance of cash apparently, but in consideration of conditions at the property, it is hardly likely that the management will resume disbursements until

there is some definite prospect of adjusting the differences between the various Mexican factions.

New Arcadian

Underground developments at the New Arcadian encourage the belief that this property is on the verge of a prosperous period in its existence. It has cut one of the best ore bodies ever discovered in the district according to report. The development of this deposit is a matter of time, but with the extensive acreage which this company owns on the mineral belt the prospects are good. Before they can be realized a long period of exploratory and development work must elapse. To finance this work, more assessments may be necessary.

Calumet & Arizona

Calumet & Arizona has caught the pace of a record-breaking production and a low record cost. In view of this its forty per cent. advance within a year is not phenomenal. Moreover, with copper still in keen demand, there is no reason why this property cannot continue to increase its output. It is more than likely that the low cost may be improved upon, also, as the new forty-ton leaching plant at the New Cornelia property, controlled by the Calumet & Arizona, will enable the latter to obtain an extraction of eighty per cent of the copper content of the ore. Earnings are running at the rate of $600,000 per month, but this is hardly high enough to warrant a dividend rate above the present. The possibility is that this property can improve its showing as to output, but it must make a substantial gain in profits before any dividend increase will materialize. This does not preclude a good improvement in the market standing of the stock under the stimulus of heavier production, but it is hardly probable in the near future. For a long pull, Calumet & Arizona, granted the continued demand for the metal, should yield a good profit from appreciation.

Granby

Granby is in line to set a new high record for production for the year. Everything at this property and at the Hidden Creek and Grand Forks plants is at the topmost point of efficiency. Future monthly reports should show increasing production and lower copper costs. The resumption of dividends this month may be taken as ample evidence that they will be maintained. Any immediate increase in the rate will not be made, but the price of the stock may be expected to reflect the improved showing of the property.

Mohawk

The market has capitalized substantially all of Mohawk's favorable factors and perhaps a goodly part of its future prospects. The mine is operating now at its utmost capacity and its earnings have shown a remarkable growth. This expansion of earnings has been passed along to the shareholders in some degree. The company, however, is restricted by its lack of milling room and, therefore, is prevented from taking a greater advantage of the present call for copper. The stock now is selling well up to the high record price for the past three years, and any further appreciation must await renewed speculative activity or an increased dividend distribution—neither of which appear very imminent at present.

Osceola

The Osceola is another Calumet & Hecla subsidiary which is handicapped by a lack of milling room. The output of rock could be largely increased but for this. A proposal which may benefit this property considerably in the matter of production and consequently increased earnings, is that of the sale of the Centennial mine to the Osceola. The Centennial is a small mine, but its rock, which is fairly good, has been exposed only on one side. Osceola's shaft is in a position which will make the task of working the Centennial ore body a simple one and supply the former with new reserves. The present rate of dividend on this stock is all that can be expected, but the market price is hardly a just appreciation of the value of the property or its future prospects. Its present price of eighty dollars per share is only ten points above last July's price, and is 13½ points under this year's high record.

Isle Royale

The future prospects of the Isle Royale property are good but are not likely to find a substantial reflection in the market position of the stock until the present controversy over the Calumet & Hecla management of the company is adjusted. The reports of the Isle Royale demonstrate that the mine has good ore bodies and that this ore can be produced at a comparatively low cost. The property has the ability to earn a fair profit; it has demonstrated that. The destruction of its mill has been a severe setback and until reconstruction is complete, the company can not show its best possibilities. In view of conditions at the property and the contest over the management any marked improvement in production and earnings does not appear probable. This means, of course, a delay in the enhancement of the market value of the stock and in the resumption of dividends. The distant prospects of the property are very good.

Quincy

Quincy and Wolverine are both selling at prices that reflect their increased dividends and general improvement in respect to output and earnings. The former is producing at practically its highest capacity and must increase its plant to better its output. This it is expected to do, and also to acquire additional mineral land holdings. Both these factors will improve the market position of the stock and ultimately should lead to higher disbursements on the shares. Quincy could afford to advance its rate but is not likely to do so for some time because of the doubling of the rate in June.

Standard Oil Company
of
New Jersey

As Great Today As in 1911 When Shorn of Its Largest Subsidiaries—Prospect for Further Expansion

By CHARLES H. PLATT.

THE early history of the Standard Oil Company of New Jersey is not only too well known for detailed review, but the present day interest in the company lies largely in its position since the dissolution of 1911. The company is successor to organizations started by the Rockefellers and their associates in 1862-67. The present title and New Jersey charter were taken in 1882. Between that period and 1899 there were several partial or nominal changes in the organization, its methods of holding subsidiaries, etc., but not until 1911 did the real change to the present status take place. In 1906, the United States Department of Justice sued the company under the Sherman Act, and the Supreme Court of the United States later affirmed decisions of the lower courts holding that the company was conducting its business contrary to the anti-trust law. The dissolution was ordered and went into effect December 1, 1911. By it, thirty-two of the former subsidiaries were made independent companies and their shares distributed prorata to stockholders of the Standard Oil Company of New Jersey.

Capitalization

The company's capital stock was originally $110,000,000, of which $10,000,000 is preferred, was retired about 1899, leaving the balance authorized capital in common stock, of which $98,338,300 was outstanding (and is still the total security obligation). The company has never had any bonded debt.

When the corporation was shorn of thirty-two subsidiary companies' stock, it was allowed to retain ownership of about a score of other subsidiaries, not one of which was of much importance in 1911. Since then, a number of these have been developed, especially foreign companies, while several new subsidiaries have been formed since. At the present time, it is probable that, with the development of these subsidiaries and the great growth of the company's own business and properties, it is fully as powerful an organization as it was on November 30, 1911. However, there is little fear entertained in any quarters that this recovery will excite further governmental interference as it has all been accomplished within the strict letter of the law as laid down in the dissolution decree.

Assets

Today, the exact subsidiary holdings of the company are not known, but they total over $100,000,000 in par value of stock. The other holdings include the properties incidental to the direct business of the company in producing, refining and marketing oil. A few weeks ago, it sold its pipe line properties and is no longer directly engaged in such transportation, although it owns subsidiaries which have pipe line properties. As a transporter of oil by coast and trans-oceanic shipping, it is one of the largest organizations in the world, now that it has acquired a number of ships from its German subsidiary in addition to what it had before or has recently built.

The company owns directly eight large refining plants in the United States and Canada having daily capacity in excess of 130,000 barrels, or above 47,000,000 barrels a year. Its foreign subsidiaries also own refining plants. Besides these, there are many other manufacturing establishments owned by it or its subsidiaries, including works for manufacturing cans, cases, barrels, shipbuilding

and repair yards, branch yards, etc.

The marketing territory includes the states of New Jersey, Maryland, Virginia, West Virginia, and North and South Carolina. Subsidiaries market throughout other Southern States, the Southwest, most of Europe and nearly all of South America.

Among other assets which might be mentioned are large quantities of oil which were bought and stored when prices were low. It is probable that the company owns 50,000,000 barrels of stored oil directly or through its subsidiaries. Oil prices are on the average about 25 cents a barrel above the low of a month ago, while large purchases were made by this company at a time when prices were even more depressed. On an average for the total given of 25 cents a barrel advance, a profit of over $12,000,000 is possible on this stored oil at present, while even further profit is probable as the tendency of oil prices is towards still further advance.

For a number of years prior to the dissolution of 1911, the company paid 40 per cent. a year or more in dividends. The highest total in any year was 48 per cent. Even though such a high rate was maintained, in the 25 years from 1882 to 1906, a total of $252,020,724 surplus was shown. The company issued partial income accounts up to the latter year which showed the following:

Total net available for dividends, 1882-1906 (incl.).	$804,442,064
Total dividends 1882-1906.	552,421,340
Profit and loss surplus for period	$252,020,724

Starting about 1903, the Standard Oil Company of New Jersey paid out about half or less of its net each year in dividends. Using the 1906 figures for net for 1907-11 inclusive, this would indicate that for each of the five years there was at least $43,786,931 added to surplus, or a total of $218,934,655 for the five years. Adding this to the surplus as of December 31, 1906, a total of $479,996,466 at the time of dissolution in 1911 is indicated. As earnings available for dividends in some years of the 1907-11 period were estimated as high as $100,000,000 or above, the surplus at the end of the period was probably larger.

In order to take care of the segregation of subsidiaries, a deduction from assets in 1911 would have to be offset by a similar deduction from surplus. The value of subsidiaries was included in the item "property owned and investments $297,125,253" at the end of 1906. In this, at least $100,000,000 would have had to be retained to represent the value of plants and other properties and of the subsidiaries which were not segregated. This would leave at most $197,125,253 to be deducted from surplus; and a balance for surplus as of December 31, 1911, of $282,871,213 is indicated.

It is believed that the policy of paying half or less of available net in regular dividends has been followed by the company since 1912. Regular dividends in that period to the end of 1915, which have been 20 per cent. a year, including allowance for one at the regular rate for the last quarter of 1915, would total $78,670,640; the extra dividend of 40 per cent. in 1913 was paid out of funds received from the repayment of loans by former subsidiaries. Allowing half of net for dividends in the period, this indicates an addition of $78,670,640 to surplus from 1912 to the end of 1915. Adding this to the estimated surplus at the end of 1911, the surplus as of December 31, 1915, should be at least $361,541,853, or nearly $370 per share. In many estimates the surplus is figured as above $500,000,000 at the present time.

As for future earnings of the company from its own operations, preparations have been made for a large expansion in business. Docks have been enlarged or new ones built to take care of expanding export trade. Refineries and other plants have been overhauled or new units constructed. Producing properties are prepared for great increase in demand for crude oil. At the present time, nearly all of the many varying activities of the company are being developed at full capacity, and the outlook is for even greater demand on them which will require further enlargement. Many new uses for oil are developing and old uses are growing. It will be through the subsidiaries, however,

that the greatest addition to earnings will come, as many of them are operating in territory which is practically at the beginning of development.

Of all the subsidiaries, the greatest possibilities seem to lie ahead of the Imperial Oil Company, Ltd., of Canada. The Standard Oil Company of New Jersey owns about 80 per cent. of the $15,000,000 capital stock of this company. It is engaged in producing oil in Canada, marketing it throughout the Dominion. It owns pipe lines connecting with other lines, which bring oil from producing properties in the United States, for the use of its refineries at Sarnia and Vancouver, Canada. The Imperial Company owns about 70 per cent. of the $20,000,000

THE ONLY COMPLETE REPORTS EVER PUBLISHED BY THE STANDARD OIL COMPANY OF NEW JERSEY OF ITS EARNINGS AND PROPERTIES

INCOME ACCOUNT

(For the year ended December 31, 1906)

Profits from own business	$10,409,890
Loss and expenses	837,894
Net profits	$9,571,996
Dividends from subsidiaries	53,227,387
Net increase value subsidiaries	20,322,869
Total available for dividends	$83,122,252
Dividends	39,335,320
Year's surplus	$43,786,932

In considering the above from the viewpoint of the present time, allowance must be made for great increase in the company's own earnings due to the great expansion in the oil business. Dividends from subsidiaries retained may not be near the 1906 figure, but are doubtless quite large as the company today owns many important companies engaged in world-wide trade.

BALANCE SHEET

(As of December 31, 1906)

ASSETS

Property owned and investments	$297,125,253
Inventories merchandise	17,871,421
Receivables	56,487,323
Cash	180,534
Total	$371,664,532

LIABILITIES

Capital stock	$98,338,382
Accounts payable	12,264,339
Profit and loss surplus	261,061,532
Total	$371,664,532

The probable present-day balance sheet should show property and investments of even more than in 1906 as the company has spent millions on its plants, etc., in the intervening years. Also its subsidiaries of today are probably almost as valuable as the ones segregated in 1911 were valued at in 1906. Great expansion in business since 1906 should have meant a considerable addition to other assets, including inventories, receivables and cash as of today. The profit and loss surplus of the present time is believed to be much larger than at the end of 1906.

capital stock of the International Petroleum Company, Ltd. The International Company is a recent consolidation of four Peruvian companies engaged in producing oil in Peru, refining and selling in that country and shipping oil from Peru to Vancouver to be refined at the Imperial Company plants there.

The selling territory not covered by the International Petroleum Company in South America is well taken care of by the Standard Oil Company of Brazil, another present day subsidiary of the New Jersey corporation which owns all of its $500,000 capital stock. Between the two, the Standard Oil Company of New Jersey is rapidly acquiring control of production and marketing in all of South America excepting in the Argentine Republic where domestic corporations control.

The Carter Oil Company, one of the largest producing companies in the world, with many large oil wells in West Virginia and Oklahoma, is another present day subsidiary which has great future possibilities. The New Jersey corporation is believed to own all of its $2,000,000 capital stock. This company in turn owns a number of valuable subsidiary properties.

Another valuable domestic subsidiary is the Standard Oil Company of Louisiana which has large refining plants in Louisiana, also marketing throughout the South, excepting on the Atlantic Seaboard, and in the Southwest. The company recently appropriated several million dollars for enlarging its refineries. The Standard Oil Company of New Jersey owns the entire $5,000,000 capital stock of the Louisiana company.

The Roumanian-American Oil Company, controlled if not owned outright by the Standard Oil Company of New Jersey, has had a remarkable earnings' record. This company produces, refines, transports and markets oil in Roumania, also selling to Central European nations. Its earnings in recent years have averaged close to 100 per cent. a year on the present capitalization of about $5,000,000.

The American Petroleum Company, which operates in Belgium and Holland, earned about 50 per cent. on its $3,000,000 capital stock (of which over half is owned by the Standard Oil Company of New Jersey) before the war. While its recent earnings are doubtless impaired by present conditions, it should again be a valuable property after the war is over.

The German-American Petroleum Company, whose $7,500,000 capital stock is all owned by the New Jersey company, is doubtless of little present value to the company. The loss of its earnings, however, is not so material when it is considered that long before the war there was a movement on foot in Germany to establish a government oil monopoly which, if consummated, would have driven this German subsidiary out of the country. As only one of many sources of earnings for the parent company, its loss would have small influence on the total earnings of the New Jersey company.

Among other larger companies owned or controlled by the Standard Oil Company of New Jersey are the Oklahoma Pipe Line Company, with $5,000,000 capital stock, operating oil transportation properties in the Southwest; and the West India Oil Company, with $3,000,000 capital stock, which markets oil in the West Indies and in parts of South America not covered by the Standard Oil Company of Brazil and the International Petroleum Company. Other important properties include a large number of properties producing and marketing natural gas, the total capitalization of which is in excess of $20,000,000.

Smaller subsidiaries of the company, some of which may be developed into important properties, include the West India Refining Company, with $300,000 capital stock, which operates oil refineries in Cuba; the Gilbert & Barker Manufacturing Company, capital stock $40,000, which manufacturers various special petroleum products; the Hazelwood Oil Company, with $350,000 capital stock, a producing property owning wells in Pennsylvania; the Atlantic Steamship Company, with $250,000 capital, owning oil tankers engaged in trade with South Europe before the war; the Interstate Cooperage Company, with $200,000 capital stock, which is engaged in manufacturing barrels to contain oil; the Bedford Petroleum Company, with $350,000 capi-

tal stock, which markets oil in France; the Italian-American Petroleum Company, with $1,000,000 capital stock, which markets oil in Italy; and various producing, refining and transporting properties.

It is considered probable that the company owns other subsidiaries. It is also believed that some apparently minor properties have large earnings far in excess of their capitalization and hence are really of considerable importance.

Market Position

In recent weeks the stock of this company has advanced from below $400 a share to a recent high of $451 because of persistent reports that either larger dividends than the present 20 per cent. a year or an extra dividend were forthcoming. The market movements of the stock since the dissolution of 1911 have been as follows:

	1912	1913	1914	*1915
High	429	448	433	451
Low	355	328	355	385

*To August 27.

It will be noticed that the recent high is above the best figures of 1912 and 1914 and even above the best price of 1913 in which year an extra dividend of 40 per cent. was distributed besides the regular 20 per cent.

In conclusion, having pointed out the value of the properties of the company and its undoubted large earning power, it might be well to say that the management of the corporation today is a model for large organizations all over the world. It is most conservative as regards its various enterprises, and even its liberal dividends have been proportionately far below those of almost every large corporation in the world when considered in conjunction with available earnings. This, however, has resulted in the replacement in the properties of the company or its subsidiaries of more than the par value of the capital stock, and this was accomplished without including such items in its assets as good will, patents, copyrights, franchises, etc. In addition to this, a profit and loss surplus of undoubtedly great magnitude has been accumulated.

Whatever may have been truthfully or falsely said of its business methods of past generations, the present day management has given every evidence of effort to strictly comply with the law. As for its past history, it must not be forgotten that in the period from 1862 to 1880, the company and its predecessors actively fought wild-cat exploitation of the oil industry and restored order out of the chaotic condition which prevailed for several generations after the first important development of the oil industry in this country. If nothing else of importance to the country was ever accomplished by a large corporation, the Standard Oil Company of New Jersey brought great economic gain by the development and placing in commercial use of many biproducts of petroleum which had been thrown away in the days before the experts of the company found a use for them, and converted them into a prolific source of profit.

Oil Notes

Anglo-American.—Has been enjoying great prosperity. Rumored that in the fall the directors will declare an interim dividend.

Atlantic Refining.—Declared a dividend of $5 a share. Company is paying at the rate of $20 per annum.

California Oil Production.—In July crude oil production totaled 250,000 bbls., an increase of 1,500 bbls. over June, 1914. Daily average output still 30,000 bbls. less than in 1914.

Galena Signal Oil.—Has renewed contract with the govt. railroad of France and Algeria at an increased price. The Mida railroad has also signed a new contract for ten years at an advanced figure. In first six months of current fiscal year company has earned its dividend with large surplus balance. It is probable that there will be no change in the present dividend rate this year, though talk of an extra disbursement is current.

General Petroleum.—Mercantile Trust Co. of San Francisco has received deposits of $7,000,000 of General Petroleum bonds and interim certicates subject to the order of the protective committee. New York committee which is co-operating with the

California committee controls $6,000,000 of bonds which leaves about $5,000,000 bonds and interim certificates outstanding. Time for deposit has been extended to Sept. 15.

Mexican Petroleum.—Management is extending company's facilities. Five new tank vessels will double oil carrying capacity on water. The political situation in Mexico is still a drag on the growth of the company.

Ohio Oil.—Declared regular quarterly dividend of $1.25, and an extra dividend of 74c. This was the same as in June.

Pierce Oil.—Better oil prices is helping the company. Plans are under way looking to resumption of operations at theTampico plants.

So. Penn. Oil.—Prices on eastern grades of crude oil have advanced 25c. a barrel since August 13, which means an increase in earnings on So. Penn.'s production of nearly 10% per annum. Insiders say that it will not be long before the company is back on its former quarterly dividend rate of 3% and 2% extra. So. Penn. is now paying 3% quarterly.

Standard Oil of California.—Last year earnings were equivalent to 20.24% on the stock in face of general depression and decline in crude oil prices. Earnings so far this year have been somewhat above the 1914 rate. This company stores nearly 50% of the entire amount of oil stored in California.

Standard Oil of Ohio.—Declared a quarterly dividend of $3 per share and an extra dividend of $3 per share.

Standard Oil of New Jersey.—Earnings this year to date have been at a rate per annum of approximately 52% on its stock. An extra dividend at the end of the year would not be surprising as the company is now paying only 5% quarterly. Various guesses have been made as to the sale price which Standard Oil of New Jersey received when it disposed of its three pipe lines to former subsidiaries. They run as high as $50,000,000. Payment is supposed to have been made partly in cash and partly in securities. When the latter are sold the stockholders may look for a "melon," according to certain interests close to the company. These same persons give $634 a share as the book value of the stock of this company. The stock sold at $450 on the Curb recently.

Texas Co.—Director says company has 25,000,000 bbls. of oil stored. Rumor that company is to separate its business into two departments, pipeage and production, is not correct. Report for the year ended June 30 last, shows gross earnings of $26,391,745, and a surplus, after charges, of $6,393,327, equal to 21.3% on the $30,000,000 capital stock as against 20.6% for the previous year.

Mining and Oil Inquiries

Utah Copper

T. W. B., Philadelphia.—Utah Copper is one of the standard issues of this class.

The May production is at the rate of 168,000,000 pounds of copper per annum, on which basis, with copper at 20¼ cents per pound, the company, from its own operations, could earn nearly $22,000,000 a year; including its equity in Nevada Consolidated's profits total earnings would be over $25,000,000 a year, or $15 per share on the 1,625,000 shares of Utah outstanding. The "if" in these calculations is, of course, that copper is selling at 20¼ cents per pound under the extraordinary demand created by the European war, and no one is wise enough to say how long the copper companies can sell their product at such a figure. Profits of the Utah Copper Co. are, however, rolling up at a rate which makes the dividend of $4 per share suggestive of a substantial "extra" at the end of the fiscal year in accordance with the announced policy of the management.

Utah Copper Co. is operating now at 100 per cent. of capacity for the first time in its history. This means that it is in position to take full advantage of the present price of copper and consequently is making money fast.

With regard to dividends on Utah Copper—and this applies to Chino, Ray Consolidated and Nevada Consolidated—its regular dividend is at rates which directors believe can be maintained on 13-cent copper. Any further profits which may not be necessary in the conduct of the business will be paid to stockholders yearly.

California Petroleum

S. H.—California Petroleum is a market football, and is too much the subject of the whims of a small speculative group whose next move hardly anyone can seem to guess. We have accordingly advised our subscribers against buying it, notwithstanding that it has some substantial moves occasionally.

Intrinsically it is not a desirable stock. The earnings of the company are poor, and there is little hope of a legitimate dividend on the common for a long time. But if you have it, keep it for a while longer—especially if it now shows a loss. We are apparently in the midst of an unward trend in the market, in which this will doubtless share to a greater or lesser extent.

Mining Digest

Ahmeek.—PRODUCED 2,400,000 pounds copper in July, and 11,000,000 pounds in first half year.

Alaska Gold Mines.—TREATING 5,000 tons daily at cost of 65c. per ton. Ore averaged $1.50 gold per ton.

Anaconda Copper. — CONSIDERABLE construction work being pushed on outlying properties.

Arizona Commercial. — PRODUCING between 400,000 and 500,000 pounds of copper a month, and earning from $30,000 to $40,000 per month. Management believes company has cut a continuation of the Old Dominion fissure vein.

Arizona Copper. — EARNED about $1,000.000 net in half year ended March 31. Will refine a portion of its product hereafter.

Butte & Superior.—PROFITS in second quarter for 1915 were $7.75 a share, based on 12.68c. spelter. Earnings for half year were $12.02 per share. Company expects to do as well in second half year.

Calumet & Hecla.—HOISTED more than 11,000 tons rock per day in July. July production estimated at 8,000,000 pounds.

Canadian Mining & Exploration. — MARKET value of assets given as $2,485,-587, or $14,412 less than paid stock subscriptions.

Centennial.—EXPECTS to earn between $2.50 and $3 per share this year.

Champion Copper. — Declared $2 dividend, making $19 in dividends declared since February 21.

Chile Copper. — FULL operations expected by October. One drill hole down 1,530 feet, and continues in 2.11% ore.

Consolidation Coal.—SOLD 60,000 tons of coal to Egyptian Railways.

Dome Mines.—IN July treated 28,300 tons at an average value of $4.67 per ton. July tonnage is the largest in company's history.

Federal Mining & Smelting. — DECLARED regular quarterly preferred dividend of 1%.

Greene-Cananea Copper.—FLOTATION process introduced at Greene plant.

Hollinger Gold. — EARNED $987,493 against dividend requirements of $840,000 from January 1 to July 15.

Inspiration Copper.—NEW mill will be in full operation by next January. Co. is now treating 2,500 tons per day. When at capacity will make 125,000,000 to 140,000,000 lbs. of copper per annum.

Kennecott Copper.—IMPORTANT vein of 70% copper discovered on 500-foot level. Intimated annual dividend rate will be in excess of $3 per share.

Miami Copper.—JULY output of 4,087,611 lbs. is high record, and cost of 8.19 cents per lb. a low record.

Magma Copper.—JULY operating profits about $75,000. Directors to meet this month to declare initial dividend. Probably 37½c. per share quarterly.

Nevada Consolidated.—EARNINGS in June quarter nearly twice those of previous quarter, and output 50% larger.

North Butte.—PLANNING to develop Rainbow and London properties.

Nipissing.—RUMOR denied that it has contract with the United States government to deliver large amount of silver. Company to acquire important new silver property.

Pond Creek Coal.—JULY output total 77,000 tons. Second largest month in company's history.

Quincy Mining.—DECLARED quarterly dividend of $2, making $5 for year to date.

Ray Consolidated.—PRODUCED 14,524,-380 lbs. in June quarter, and showed net income of $1,340,000, against dividend requirements of $547,000.

Shannon Copper.—PRODUCED in July 928,000 lbs. of copper, and earned $55,000 net. Cost of production about 12¾ cents per lb.

Stewart Mining.—IN fiscal year ended June 30 paid 42½% dividends, making total of 140% since June 30, 1913.

Standard Silver-Lead.—DECLARED dividends of 2½c. per share; net profits for July $85,000.

Tennessee Copper.—BRITISH government inquiring for 20,000 tons of sulphuric acid. President deplores speculation in stock. Acid profit this year estimated at 50%, and copper profits 12% on stock.

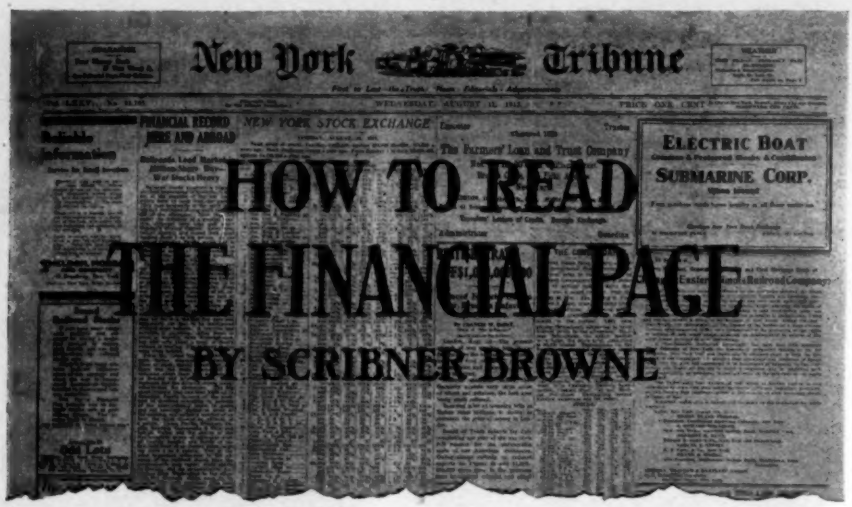
Tonapah Extension.—DECLARED regular quarterly dividend of 5%, and extra dividend of 2½%.

Utah Consolidated.—DECLARED dividend of 50c. a share.

Utah Copper. — IMPROVEMENTS at mill to increase production 25%, or 3,000,000 lbs. a month.

Yukon Gold.—HAS acquired new California dredging property, with gross value estimated at $4,000,000. Has ordered largest gold dredge in the world.

TRADERS' DEPARTMENT



Part II

The Interpretation of Prices and Averages

IT GOES without saying that the most important facts given on the financial page of the newspaper are the prices of the various stocks shown there. Every share of stock in every one of those corporations is owned by somebody, and the only way the owner has of knowing the price of his security is, in most cases, by consulting his newspaper from day to day. This creates a big demand for lists of prices and the newspaper of course endeavors to satisfy that demand as fully as possible.

It is not only the owners of the stocks that are interested, but also many thousands of people who are thinking of buying or selling, and many other thousands who keep posted on prices as a matter of general information.

When a man gets interested in one or more securities, the first thing he does is to begin to notice their prices every day. From this he is generally led into noting the general course of the market as a whole—since he soon observes that the whole market *has* a general course or trend. The demand for some *measure* of the general trend of the market has led some of the best financial newspapers to publish each day *averages* of the prices of a selected list of railways and another list of industrials. It is advantageous to separate the two because they are often influenced by quite different factors.

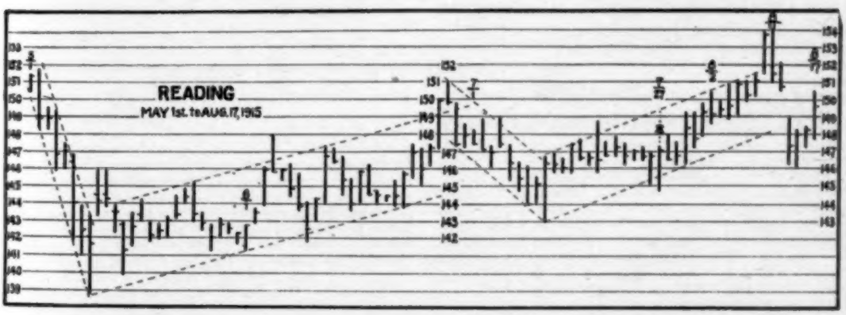
The investor, or prospective investor, who begins by noting from day to day the price of some stock, is pretty apt to conclude before long that he would be helped if he had some sort of record of the price, so that he could the better judge the relation of present prices to past prices. He soon begins to keep memoranda of prices, with the dates of high and low points reached.

The Use of Graphics

As he becomes more and more interested, it is likely to occur to him that these memoranda could be kept more briefly and easily in graphic or chart form and he is probably found with a "little red book" in which he charts the progress of the market or of particular stocks in some convenient form.

So long as he looks upon these charts as nothing but records of past prices, they are useful and no legitimate objection can be raised against them. If he allows himself to be switched off into the effort to discover some "system" by which future prices can be predicted, he is lost and should throw his charts into the waste-basket and make a fresh start. There is no way of predicting future prices except by the exercise of judgment and common sense. If he uses his charts merely as an aid to his judgment, they are helpful, but he must be careful to confine them strictly to their proper place.

On the other hand, it must be admitted that it is impossible to keep in mind any definite and accurate idea of the past prices of several stocks and of the whole market, without some form of graphic record. Hence, while we admit that such records are subject to abuse, we must include them as a part of the necessary machinery of the man who intends to take a serious interest in investments.



Two forms of priee records are in common use and illustrations of both are given herewith, covering the movement of Reading from May 1, 1915, to August 17. The first is simply a transcription of the price record of the stock as it appears in the newspaper day by day. Paper is used which is ruled in small squares, usually eight to the inch. One vertical line is used for each day and one space represents half a point movement of the price. A line is drawn to show the price range for each day. A tick at the right side of the line shows the closing price, and one at the left side shows the opening price, when it is desired to record that also.

This is a very simple and condensed method of recording prices and it is a decided help in forming an opinion when to buy or sell. It will be noticed, for example, that the price has a tendency to move in "channels," as I have named them in previous articles. These are outlined upon the diagram by dotted lines. Each of these channels represents the effect of some major influence upon the price of the stock, while the minor movements within the channel are the result of "technical" conditions—that is, the operations of floor traders and day-to-day speculators.

It will be observed that when the price breaks out of this channel on one side or the other, it has a tendency to rebound sharply. This is because speculators have temporarily pushed the price farther than was warranted by the conditions.

Such a diagram is helpful in practical work. For example, if on June 1 you believed that the general movement of the price should be upward—that is, that *conditions* were bullish, for as I have said the graphic indicates nothing about that—you would not be likely, after examining the graphic, to buy when the price was at the upper dotted line, but you would wait for it to approach the lower dotted line. You would thus make your purchase about five points lower than though you had bought when the price *seemed* strongest. If in the same way you were able to sell five points higher than you might otherwise have done, your gain from using the graphic would be manifest.

The principal swings of the price were of course caused either by the development of the general situation or by special news affecting the Reading road. The sharp decline beginning August 11 was chiefly due to the adverse decision of the Interstate Commerce Commission in regard to anthracite rates. The abrupt downward movement at the beginning of the graphic was largely the result of the sinking of the *Lusitania*—although the position of the market was weak when this news came out, so that the decline could hardly be said to be entirely due to that reason. The slow upward movement extending over most of the graphic represented the gradual improvement of business conditions.

The "Figure Chart"

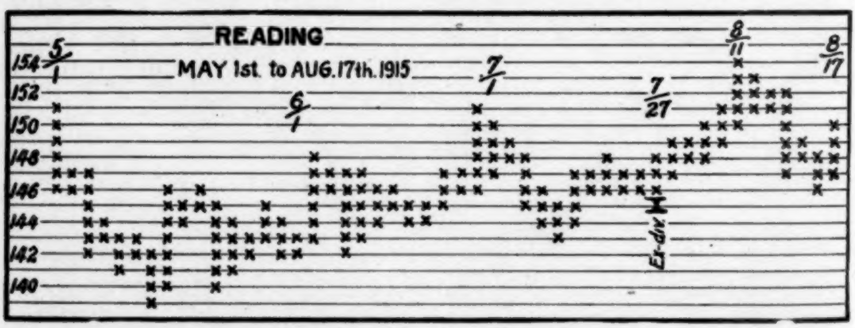
The other brief and convenient method most commonly employed for recording prices is shown on the second diagram and is usually called a "figure chart." The same paper, ruled in small squares, is used, and whenever the price touches or crosses a *whole number,* a cross is made on the diagram after the manner shown, fractional prices being ignored.

Suppose we have a price movement as follows: 80⅜, to 81⅞, to 79, to 80¾, to 79⅛, to 82, to 81, to 82⅛, to 81⅛, to 83, to 80⅞, to 81¼, to 78⅛, to 83, to 81, to 84, etc. Each whole number will be noted on the chart when it is reached or crossed, as follows:

84							x
83			x		x		x
82		x	x	x	x	x	x
81	x	x	x	x	x	x	
80	x	x		x	x		
79	x			x			

Reading sold ex-dividend two points on July 27 and the manner of treating this is shown on both diagrams. On the daily chart the dividend is shown by the dotted line marked "X." On the figure chart the large "X" at the price of 145 July 27 shows that this was the first price after the stock sold ex-dividend.

I think this method of handling the dividends is the best for the man who



In order to keep this record in its complete and most useful form, it is necessary to have the *continuous* quotations for each day—not merely the opening, high, low and closing. For this reason the figure chart cannot conveniently be kept in its full form by those at a distance from New York, as the continuous quotations are published by two New York papers only.

An example will make plain the exact method of constructing the figure chart.

watches the market by the aid of his newspaper. Active traders, who follow the tape or watch the blackboard usually raise the scale at the left of the diagram to correspond with the amount of the dividend, as they think that is a better and more symmetrical record of the immediate movement of the price. It makes very little difference, probably, which plan is followed.

I have tried to give above a brief explanation of the practical uses of records

in graphic form. There is no such thing as "chart-reading," in the sense of judging the future of the market by its past as shown on the charts. But on the other hand, the better and more accurate and definite the information that the investor has in regard to the level of present prices as compared with previous fluctuations, the better start he gets for the exercise of whatever judgment he may have in regard to the investment situation.

I will take up "average" prices more fully in connection with volume of trade, in the next article.

(*To be continued.*)

Reducing "G. T. C." Orders When Stock Sells Ex-Dividend

EDITOR of the Magazine of Wall Street:

At the time Reading last sold ex-dividend, I had order placed to buy a certain amount of this stock at 151¼ stop; this order being a quarter point above the last high. Two or three days after I received a telegraphic notice from my brokers advising that my order had been executed at 149¼. Upon receipt of this report, wired the brokers stating I had given no instructions to purchase at 149¼, and have received letter from them stating that it is the invariable rule to reduce the order the amount of dividend on date of ex-dividend and stating they had sent me notice to this effect. Received the written notice immediately after the notice of purchase, too late to do any good.

Are my brokers correct in their statement? It would not seem to me that it would be proper to change an order in this manner until O. K.'d by customer, as a stock often gains the amount of dividend in a very short time.—J. P.

It is the rule of brokerage houses here in New York to reduce standing (or g. t. c.) buying orders an amount equal to the dividend as soon as the stock sells "ex." Selling orders, however, are not so reduced, but are left at the same figure as before the dividend came off.

The philosophy of this is that when the trader is long of stocks, the dividend will, in the long run, substantially balance the interest charges on his account, and it is, therefore, assumed that he will not wish to reduce his order to sell his stocks when the dividend comes off. On the buying side, however, it is presumed that the buyer will prefer to reduce his order by the amount of dividend.

These rules are applied to stop orders as well as to ordinary buying and selling orders. This seems a little unreasonable, as stop orders are usually of a quite different character and put in for different purposes from other orders; but it seems to be the rule of all the houses we are familiar with.

Most brokers endeavor, if convenient, to reach the customer by telephone or otherwise and learn his wishes in regard to changing his price when the dividend comes off, but it is not always practical to do this, especially if the trader lives at a distance.

A MARKET which repeatedly refuses to respond to good news after a considerable advance is likely to be "full of stocks"; likewise a market which will not go down on bad news is usually "bare of stocks."

Technical and Miscellaneous Inquiries

Surplus Deposits

I have been endeavoring to keep a record of surplus deposits as shown by the New York Clearing House institutions in their weekly statement. Have added the net demand deposits and time deposits together, then subtracted the loss, which gives at the present time a balance of surplus deposits of about $120,000,000. Would thank you very much if you would inform me whether or not my method is correct.—B. D.

Your method is correct. Doubtless you are using the figures for all the banks and trust companies in the Clearing House combined, hence your figures will not agree with the per cents given in the table of statistics which appears in every other issue of The Magazine of Wall Street. This makes no difference, provided that the same figures are used throughout the entire compilation, so that the graphic will be consistent with itself.

"G. T. C." Orders

Not long past I bought a string of several stocks in odd lots at the market. I entered orders on same to sell five points up or stop three points down. I received a reply from my broker stating that orders had been entered as above good "until cancelled or changed." A week later I wired him to sell all my stocks at the market, which he did.

More than a week later I received notice of sale of three of these stocks five points above purchase two weeks past.

On calling his attention to this he replied that since these old orders were never cancelled, I would have to accept the executions.—C. C.

Your broker was, strictly speaking, correct in his handling of your orders. Since you did not explicitly cancel your selling orders, they still stood on his books and were executed when the specified prices were reached. It is always necessary in such cases to watch these open orders and cancel them when you do not wish them executed.

Some brokers, however, would have watched your business more carefully and would have reminded you when you sold your stocks that you still had standing some G. T. C. orders which you would probably desire to cancel.

Short Sales for "Investment"

Is it possible to operate on the short side similar to an outright purchase on the long side?

What is the broker's procedure in a short sale?—S. W.

It is not possible to sell stock short in any way that exactly corresponds to an outright purchase on the long side. You can, however, deposit a very liberal margin with your broker, so that your short sale will be amply protected in case of any extended advance in the price of your stock.

The broker, when selling stock short for a customer, borrows the necessary certificate from some other broker for delivery to the buyer. You will find full information in regard to the machinery of selling in "Pratt's Work of Wall Street," price $1.85, postpaid.

Stop Orders in Odd Lots

My broker refuses to accept stop loss orders on less than 100 shares. Is his position justified by custom?—W. E.

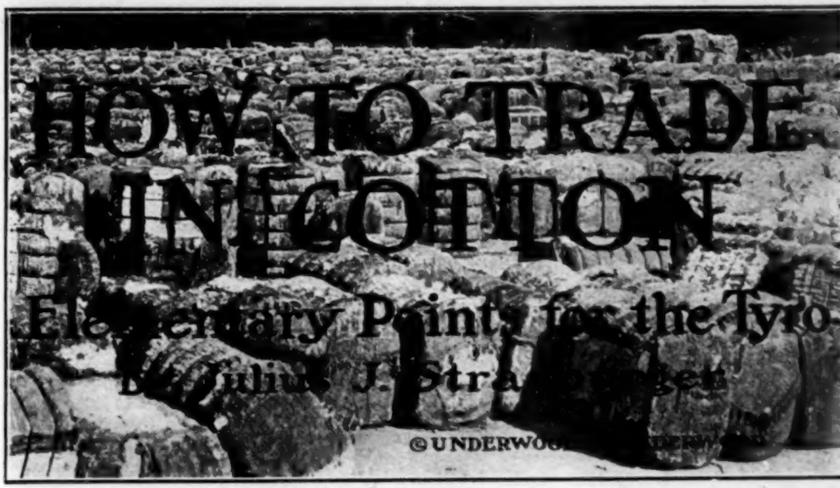
Our opinion would be that if your broker accepts your orders to buy or sell 10 shares of stock on margin, he should also accept a stop order for 10 shares. From the legal point of view, he has a right to run his business in this particular in accordance with his own ideas, but all the brokerage houses we know which accept odd lot orders on margin, accept stop orders just the same as any other kind of orders.

Mix-up Over Partial Payment Plan

I am a small trader and buy on partial payment plan. On August 3 I placed a verbal order to buy 5 Crucible at the market. About 10 minutes later I was informed that stock had been bought for my account at 72⅜. On August 4, my local broker said to me: "New York won't accept that order on Crucible on partial payment plan at present prices." August 5, I received a confirmation from New York, in the usual form, covering 5 Crucible bought for my account and risk at 72⅜." Now, where do I stand? Have I the stock or haven't I? It is my opinion that these Crucible shares are charged to me after all, and that there must be some mix up. Can I compel my broker to furnish me this stock, especially since I was informed they had been bought for me and I received confirmation covering the purchase?—E. B.

If you have a confirmation from your broker in the usual form confirming the purchase, there can be no question at all that the stock was bought for you and now belongs to you. We judge that your broker's statement to the effect that New York would not accept the order on "partial payment plan," refers not to the purchase but to the "partial payment plan." That is, your broker purchased the stock in accordance with your order and will deliver it to you, if paid for in full, or will doubtless carry it on a reasonable margin for you, but does not care to handle it on the "partial payment plan." This is an entirely reasonable position, in view of the high speculative character of Crucible Steel and the sharp advance it has had. He could not be expected to carry it for you on the ordinary "partial payment plan" under these conditions.

We think if you will have a frank talk with your broker's representative in regard to this trade, you will have no difficulty in getting the matter straightened out to your satisfaction.



THERE are innumerable attractive opportunities for profitable dealing in cotton. Houses engaged in the cotton commission business, when members of recognized Exchanges, are among those unimpeachable for integrity and fidelity. New York has the leading cotton market of the world, and its Exchange affords advantages to those interested in cotton which some of the others cannot boast.

The government provides the trade with periodical reports, issued very frequently. They estimate the growing condition of the crop from the stage before the seeding has been finished to the stage when the crop has been all picked and ginned. The government goes even further; it visualizes the distribution of the crop, telling how and where the cotton is being consumed from time to time.

In addition, there are numerous other organs constantly supplying valuable and reliable data, bearing on the cotton market as price-shaping factors. Several large concerns engage their own crop experts and correspondents to keep them unbiasedly informed as to what may be transpiring. The New York Cotton Exchange maintains an expert statistical staff and in other ways makes available essential cotton facts. Succinctly, there is a "raft" of guiding reports at the disposal of the trader in cotton which must aid him in forming conclusions and price-ideas.

And there are natural advantages accruing to those having to do with the valuable white product of the South. In this category may be mentioned the fact that the great bulk of the world's cotton is produced in the American South—prices are really directed in this country and the important distribution of cotton takes place on our land.

If one becomes convinced that the price of cotton is lower than warranted, the next step is to acquire some cotton. You may, through the medium of the Exchange purchase any quantity of the *ACTUAL* cotton, receive it within a few days after the purchase date if desired and hold it indefinitely, until a selling price appeals to you. This is a cumbersome method for the speculatively inclined investor. There are many technical points arising from a transaction of this sort, storage, insurance and interest charges and you can only enter one side of the market by such a transaction—the buying or LONG side.

But to deal in CONTRACTS on the New York Cotton Exchange is a simple matter bereft of inconveniences. If the price of these contracts, which have a broad and popular market, is low, you

may get LONG of the market by purchasing one, two or three of them or as many as you choose. If the price is high and you anticipate a fall, a position on the SHORT side may be taken by selling these contracts.

In the dealing of these contracts or FUTURES as they are oftimes designated, there are no interest, warehouse or insurance charges. You will merely be asked to pay a commission of four points after a COMPLETE transaction —i. e., the buying and selling of one contract.

The "Contract"

It is essential to remember that a contract on the New York Cotton Exchange is ONE HUNDRED BALES. Thus, five hundred bales bought or five hundred bales sold would represent five contracts. This ONE HUNDRED BALE contract dealt in is the MINIMUM quantity that can be bought or sold according to the rules of the New York Cotton Exchange. Each point fluctuation in the market is equal to five dollars on a contract; a thirty point rise or decline being equivalent to $150 on a single contract of 100 bales.

Fluctuations

A study of the price changes for a number of years shows that cotton quotations fluctuate an average of fifteen to twenty points daily. There are exceptional periods when fifty to eighty point changes are registered in the course of a day. Rare cases are those of 100 point movements in a regular session, from 10 a. m. to 3 p. m.

Margins

A trader is required to protect his "long" contract against a slump in the market or his "short" contract against an advance. The amount of money demanded for this margining or protection of contracts depends largely upon the state of the market—whether it is active or quiet, and it should be a simple detail for the commission house to arrange agreeably with its customer for marginal deposits. Ordinarily, a sixty or seventy point margin ($300 to $350 on a contract) suffices.

Cotton contracts are quoted in cents and hundredths of a cent per pound. A price of 9.90 for December cotton would mean .09 90/100c. per pound. There are 500 pounds to a bale and fifty thousand pounds to a cotton contract; hence a

Official Cotton Quotations on New York Cotton Exchange from 1913 to 1915

Season	Highest	Lowest	Average Price
1914-15	10.60	7.25	8.97
13-14	14.50	11.90	13.30
12-13	13.40	10.75	12.30
11-12	13.40	9.20	10.83
10-11	19.75	12.30	15.50
09-10	16.45	12.40	15.37
08-09	13.15	9.00	10.42
07-08	13.55	9.90	11.30
06-07	13.50	9.60	11.48
05-06	12.60	9.85	11.20
04-05	11.65	6.85	9.13
03-04	17.25	9.50	12.58

Comparative Crops for a Series of Years

	Bales.		Bales.
1915-16 crop	....	1908-09 crop	13,825,000
14-15 crop	16,890,000	07-08 crop	11,571,000
13-14 crop	14,588,000	06-07 crop	13,510,000
12-13 crop	14,167,000	05-06 crop	11,345,000
11-12 crop	16,138,000	04-05 crop	13,566,000
10-11 crop	12,120,000	03-02 crop	10,011,000
09-10 crop	10,610,000	02-01 crop	10,728,000

hundred point fluctuation, equal to a cent a pound would be equivalent to $500 on one contract. At 9.90 a contract would represent a money value of $4,950; at 10.90 the value would be $5,450.

It is essential to bear in mind that an operator long or short of say, December cotton, really does not have to close his commitment while December is shown on the calendar, although few outside traders remain in a contract until it becomes a CURRENT MONTH contract. Arrangements can easily be made with the brokerage house to transfer the commitment as far as ten or eleven months ahead. Thus for the speculator it is generally advisable to select the more remote contracts. At present, there is a very satisfactory market for contracts not expiring until near the end of May, 1916.

Appended, are shown the crops for a series of cotton seasons, also the prices which ruled in the New York market. Until very recently, the cotton season was calculated from September to September, but it is now figured from August 1—the approximate date at which new cotton starts to move from the plantations.

Autumn Problems in Cotton

By C. T. REVERE

DEVELOPMENTS IN COTTON during the last two weeks have failed to throw much light on the outlook, but the time is not far distant when the situation can be analyzed with more accuracy. There has never been a period in the history of the trade when so many complexities were involved. The operator who attempts to forecast the future must deal with the puzzling problems of international politics, an unprecedented situation in foreign exchange, a large surplus from the old crop, doubt concerning facilities for marketing the new crop, a complete readjustment of ideas in relation to the factors entering into consumption, and last, but not least, a confusion of ideas over the present season's production.

The situation promises to be clarified to a certain extent by the development of several of these factors at an early date. For instance, the cotton trade is in a fair way to learn where it stands in regard to exports. The contraband declaration has been issued by France and Great Britain and unusual difficulties will surround shipments of cotton to Germany. Hitherto these exports have been subjected to irregular seizures and American cotton exporters were largely in the dark as to the procedure they should take. They knew that direct shipments to Germany were attended by great hazard, but continued to send cotton to Norway, Sweden, Holland and Italy.

Under the rules of contraband the destination of the cargo will be the determining factor. Cotton can go forward to neutral countries, but not in such large amounts as to give rise to the suspicion that some of these shipments will ultimately reach Germany and Austria. The burden of proof of enemy destination will be upon the French and British captors and the case will go before the Prize Courts of these two big countries, which will be the sole judges of determining the legality of the seizures. Whereas before all cotton that was taken was paid for, the procedure of the Prize Court will permit confiscation and thus put American shippers on their guard about violating the rules of international law.

The contraband declaration confessedly will operate against liberal shipments, and this feature is taken into consideration by France and Great Britain. Both of these countries have given assurances that the hardships attending their action will be mitigated to a certain extent. It is believed that they will adopt measures entailing purchases that will offset to a considerable extent the loss of the German and Austrian markets. In fact, a certain amount of buying in the last two

weeks indicates that the Allies have already taken steps to put their vague promises into execution.

Germany is buying cotton in this country. Large purchases have been made in the contract market, and these commitments, executed at reasonably low prices, will not be for sale for a considerable period unless the market makes a substantial advance.

For some time past the trade has been greatly obsessed by the large stocks of cotton in Europe, particularly at Liverpool. The supply at the great English market is larger than ever before known at this stage of the season. Consequently, the American trade has been more or less surprised over the inquiries coming from English importers. This is explained on the ground that the stock of cotton in Liverpool is low in grade and short in staple. Some merchants have burdensome accumulations of this cotton and are in no position to buy. Others have fairly clean books and are willing to import cotton from the new American crop in consideration of the present premium obtaining in the Liverpool contract market.

The break in foreign exchange to the new low basis adds materially to the cost of cotton importation. It means that the European buyer must convert the money of his country into American dollars, and by this operation he adds approximately 20 per cent. to the cost of his purchases in the South. In addition to this the high freight rates and the high insurance rates make cotton a pretty expensive article by the time it reaches Europe. On the basis of prevailing exchange, freight and insurance rates, cotton bought in Texas at 9 cents costs nearly 12½ cents by the time it reaches the Liverpool market. As the situation now stands, the Southern planter may have a basis for complaining of low prices, while the foreign buyer can grumble about high prices. Although efforts have been made to correct the exchange situation through huge gold shipments and establishment of credit in this country, it will be impossible to make any predictions with certainty. Exchange experts are committed to a rather pessimistic view and most of them look for a further decline.

So far as the marketing of the new crop is concerned, there is a radically different situation from the one which confronted the trade at the beginning of last season. The financial resources of the Federal Reserve banks are plethoric and efficiently mobilized. Upon the bare announcement that the Allies had put cotton on the contraband list Secretary McAdoo announced a plan for placing $30,000,000 in gold in Southern Federal Reserve banks as a basis for loans to cotton growers at 6 per cent. interest. There is an enlightened and co-ordinated policy among Southern bankers who are determined to see that the cotton grower who has his product properly warehoused and insured shall have ample funds at a reasonable rate. The warehouse facilities of the South have been largely increased and are now ample for a production equal to that of the present season.

With all these troublesome factors in a fair way to be adjusted the price of cotton is now fairly up to the normal factors of supply and demand. According to the condition report of the Bureau of Crop Estimates issued August 30, the crop promises to be somewhere in the neighborhood of 11,800,000 bales. The writer is firmly convinced of the futility of crop estimates at this season of the year. The yield may still be less than 11,000,000 bales and may be more than 13,000,000 bales. Everything depends upon the season from now on.

The crop has been subjected to the injurious effects of a prolonged drought in Texas, parts of Oklahoma and scattered sections of Alabama and the central belt. This unfavorable feature has been recently corrected by copious rains. The precipitation was so abundant that for a time it gave rise to fears of damage from excessive moisture. This anxiety, however, is groundless so far as direct injury is concerned. The plant at this stage of the season is too large to be hurt by rain. The quality may suffer, but the quantity will be increased, provided the new growth of the plant has sufficient time to mature before frost comes.

Indirect injury, however, can result from the ravages of boll worms whose operations are greatly facilitated by a prolonged wet period at this stage of the

season. The soil now has sufficient moisture to carry the crop through the remainder of the season.

In 1900 Texas suffered from a drought similar to that which has prevailed this year. The Galveston storm of 15 years ago brought in its wake abundant rains which revived the shriveled plant. Frost held off until after the first of November and a bumper crop resulted. It is natural for one to presume that history will repeat itself this year, but this is by no means certain. The plant requires time to put on fresh growth and to develop the blooms, squares and bolls. With a frost of average date the promise of a large addition to the yield might be grievously disappointed.

There is no doubt that the advance of 90 points in one week, which culminated just before the issuance of the Government report on August 30, has revived the courage of the bulls. Cotton has shown that it can advance in the face of an unfavorable international situation, demoralized exchange and large accumulations of old supplies. Cotton is a great favorite with the speculative public. The price is by no means high, and it is more than likely that the market will meet with strong buying of a speculative and trade character on a moderate setback. Moreover, it should not be overlooked that French and British interests are tacitly committed to the support of the market if there be danger of a drastic break.

Paradox of the Wheat Market

By P. S. KRECKER

WHEAT presents the striking paradox of declining prices and minimum supplies. At a time when the visible reserves in the United States are just a trifle more than 8,000,000 bushels, or barely one-fourth of the normal visible at this time of year, when the world's available supplies are a paltry 71,000,000 bushels or only two-thirds of what they were a year ago and only 50 per cent. of the available two years ago; when further, the movement of new crop wheat is suffering from unprecedented delay and receipts at primary markets are less than 50 per cent. of those last year (actual figures at present writing make the total receipts at 11 primary markets 41,402,000 bushels since July 1 compared with 89,751,000 bushels the previous year) wheat future markets have been making new low prices for the season.

Hopes of the bulls have been badly shattered and the bears are correspondingly elated. What makes the paradox the more emphatic is the fact that there is no immediate promise of improvement in the movement of new crop winter wheat while its quality is impaired so seriously as to reduce materially the prospective supply. A tropical storm sweeping up from Texas has interfered with threshing over a wide area of the winter belt and where the excessive rainfall has not been felt, threshings reveal an abnormally high percentage of moisture.

In spite of these conditions the paradox of the wheat market is more apparent than real. In the first place, even allowing for loss through excessive rain on newly cut winter wheat, there will undoubtedly be a normal supply of that crop. In addition to this the promise of a brilliant spring wheat harvest has been undimmed either by heat or cold or rain and it now is certain that late harvested wheat will be in superabundant supply both in Canada and in the United States. Combine with this situation the exasperatingly dilatory tactics of European buyers, and the answer to the puzzle is had. There no longer is any question that foreign buyers are going to proceed with deliberation in accumulating their fresh supplies of wheat. English importers are paying little or no attention to the winter wheat situation in the United States. Neither the shrunken visible supply nor the delayed movement and deterioration of quality of winter wheat has caused the slightest alarm in the United Kingdom, because of the

enormous spring wheat harvest, now practically secure from all harm. As suggested by the writer heretofore, England will show a preference for Canadian wheat this year and will take wheat from the United States only when the Dominion has disposed of its big surplus. Increasing difficulty of financing purchases of wheat in the United States furnishes the most conspicuous explanation of this now obvious policy.

Foreign exchange has broken to new low levels and talk of bolstering the sterling market up has had no practical effect. England can pay Canada when and where she pleases; she can go so far as to commandeer the wheat crop of her territorial farmers if need be, while she could not avoid paying us full prices. The question whether Great Britain can afford to bide her time in laying in supplies of wheat is answered by statistics on her present situation. Estimates of the wheat reserves of the United Kingdom place them at 28,000,000 bushels at the beginning of the current month.

The new crop of wheat in the United Kingdom is believed to range anywhere from 68,000,000 to 72,000,000 bushels, or well above that of last year. It is figured by statisticians that under these circumstances England has sufficient supplies to provide for her needs for the next five months. Long before that period shall have expired, Canada will be pouring her surplus into English bins while the United States will be offering spring wheat in unprecedented volume. With a prospective exportable surplus of half a billion bushels of wheat from the United States and Canada, England can well afford to wait.

As for the general European wheat situation it may be said to be a little mixed. Italy is in an inferior position compared with a year ago. Then she had reserves, according to official statistics, of 54,000,000 bushels against only 32,000,000 bushels this year, a shrinkage of 43 per cent. Moreover her crop is estimated to be only 164,000,000 bushels compared with 168,000,000 bushels last year, making an apparent deficiency in reserves and new crop supplies of 28,000,000 bushels which must be made up with increased exports. Italy imported 60,000,000 bushels of wheat last year and should, at an equal rate of consumption, take about 90,000,000 bushels this season.

While reliable statistics on France are not available yet, it is certain that her wheat crop has suffered bad setbacks and is materially smaller than a year ago. On the other hand Russia has a large crop and European countries not in the war zone have increased their production.

When figuring upon the quantity of wheat which Europe will buy from the United States, statisticians are prone to ignore an element in the situation which is bound to have an important bearing upon exports at existing high levels. For it must not be forgotten that wheat is high at the dollar mark, although no longer abnormally high. The factor to which reference is made is the amazing increase in the world's production of food cereals other than wheat. Remembering that the world's yield of wheat this year is likely to exceed that of last season by between 18 and 20 per cent., an average increase of 20 per cent. in the harvests of other cereals cannot help but be a factor to be considered.

Such an increase has taken place if the figures collated by the International Institute of Agriculture of Rome, Italy, are accepted as correct. Exclusive of the Teutonic countries, then, there has been a production this seasaon of 118.7 per cent. in rye compared with last year, of 124.1 per cent. in oats, of 119.0 per cent. in barley and of 117.2 per cent. in wheat.

It will be seen that the average increase in the three cereal crops of rye, oats and barley, has been 20 per cent. and that the average increase in the grain supply of the world exclusive of corn has been about 20 per cent. This important increase is of course the economic answer to the high prices war created in the grain markets during the past season. Its bearing on the wheat situation is that all of the cereals mentioned are popular foods abroad, rye in particular, and that from economic necessity all will enter increasingly into human consumption by reason of their cheapness compared with the high price of the premier cereal of the world, wheat.